

# B-Stat News

The Newsletter  
of the  
*Belgian Statistical Society*  
*Belgische Vereniging voor Statistiek*  
*Société Belge de Statistique*

Number 37 – May 2006

Editeurs responsables/Verantwoordelijke uitgevers :

Olivier Thas, Universiteit Gent  
Coupure Links 653, 9000 Gent

Sophie Vanbelle, Biostatistique et informatique médicale, Université de Liège,  
CHU Sart Tilman, 4000 Liège

## **THE COUNCIL OF THE SOCIETY**

### **President**

Adelin Albert, Université de Liège

### **Vice-President**

Paul Janssen, Universiteit Hasselt

### **Secretary of the Society**

Gentiane Haesbroeck, Université de Liège.

### **Treasurer**

Marc Aerts, Universiteit Hasselt

### **Administrators**

Luc Bijnens, Janssen Pharmaceutica  
Frans Desmedt, Institut National de Statistique  
Uwe Einmahl, Vrije Universiteit Brussel  
Irène Gijbels, Katholieke Universiteit Leuven  
Marc Hallin, Université Libre de Bruxelles  
Mia Hubert, Katholieke Universiteit Leuven  
Philippe Lambert, Université catholique de Louvain  
Jean-Paul Rasson, Facultés Univ. Notre-Dame de la Paix, Namur  
Didier Renard, Eli Lilly  
Christian Ritter, Université catholique de Louvain

### **Website of the Society**

[www.sbs-bvs.be](http://www.sbs-bvs.be)

### **Webmaster**

Laurence Seidel : laurence.seidel@ulg.ac.be

## **TABLE OF CONTENTS**

|                                                                       |    |
|-----------------------------------------------------------------------|----|
| Procès-verbaux des Assemblées générales .....                         | 2  |
| Verslagen van de Algemene Vergaderingen .....                         | 11 |
| 14 <sup>th</sup> SBS-BVS Annual Meeting BSS 2006 .....                | 20 |
| Announcements .....                                                   | 21 |
| Forthcoming statistical events in Belgium .....                       | 25 |
| Members news .....                                                    | 26 |
| Inaugural lecture of the Francqui Chair awarded to Pr. M. Hallin..... | 27 |
| 2006 ENBIS Awards .....                                               | 30 |
| StatUA: newly founded forum for (applied) statistics at the UA.....   | 31 |
| Recent Ph.D. theses .....                                             | 33 |
| Recent Publications .....                                             | 36 |
| StatUA .....                                                          | 36 |
| ISRO .....                                                            | 46 |
| FSAGx .....                                                           | 50 |
| UHasselt.....                                                         | 52 |
| KUL .....                                                             | 62 |
| UCL .....                                                             | 73 |

## **PROCES VERBAUX DES ASSEMBLÉES GENERALES**

**Assemblée générale du 22 février 2006  
à 17h à la Katholieke Universiteit Leuven**

*Présents:* M. Aerts, A. Albert, C. Dehon, G. Haesbroeck, M. Hallin, P. Janssen, P. Lambert, W. Rey, Ch. Ritter, P. Slock, J. Teugels, M. Vandebroek.

*Excusés:* L. Bijnens, T. Bruss, J.J. Claustriaux, P. Dagnelie, U. Einmahl, I. Gijbels, J. Loris-Teghem, D. Renard, H. Van Oyen.

La séance est ouverte à 17h15.

### **1. Approbation du procès verbal de l'Assemblée générale du 24 février 2005**

Le procès verbal, publié dans le *B-Stat News* N°34 de mai 2005, est approuvé sans modification.

### **2. Rapport moral et rapport d'activités**

Le Président A. Albert dresse le bilan des activités de l'année 2005, première année de son mandat à la présidence de la SBS-BVS.

- Le Conseil d'Administration de la Société s'est réuni à trois reprises, respectivement les 9 mai, 4 octobre et 6 décembre 2005, chaque fois à l'Institut National de Statistique (INS) à Bruxelles. A. Albert profite de l'occasion pour remercier, au nom des membres du Conseil d'Administration, l'INS pour son hospitalité et sa générosité. Comme il l'a écrit dans son éditorial du numéro de janvier du B-Stat News, il regrette les moments difficiles que traverse actuellement l'Institut National de Statistique suite à une réorganisation interne. En réalité, l'INS est devenu au sein du Service Public Fédéral (SPF) Economie, Petites et Moyennes Entreprises, Classes moyennes, une entité de la « Direction Générale Statistiques et Informations économiques ». La SBS-BVS a reçu l'assurance de pouvoir maintenir son siège social au 44, rue de Louvain à l'INS, de

continuer à tenir les réunions du CA dans la salle Quetelet et de pouvoir compter sur un soutien financier annuel de 2.500 €.

- L'effectif de la Société a atteint le nombre de 342 membres. En 2005, 26 nouveaux membres ont rejoint la Société et 8 membres supplémentaires seront approuvés à cette Assemblée générale, ce qui conduit à un total de 34 nouveaux membres en 2005. Cependant, un certain nombre de membres seront aussi rayés de la liste car ils ne sont pas en ordre de cotisation. Les règles des ASBL-VZW sont devenues plus strictes et il est important pour la société de respecter la législation en vigueur. Un travail important a été réalisé par la secrétaire G. Haesbroeck pour veiller au respect des dispositions en matière de cotisation de membre et le CA l'en remercie.
- En 2005, il y a eu trois parutions du B-Stat News (N°33, 34 et 35). Le CA a dû pourvoir au remplacement des deux éditeurs du B-Stat News, Mia Hubert (KUL) et Philippe Lambert (UCL) qui ont souhaité se retirer après 4 années de loyaux et fidèles services. Le Président tient à leur exprimer sa plus vive reconnaissance pour la qualité et la quantité de travail accompli. Durant leur mandat, ils ont su maintenir à un bon niveau la revue créée en 1992. En 2005, le CA a nommé deux nouveaux éditeurs pour le B-Stat News, Olivier Thas (UGent) et Sophie Vanbelle (ULg). Le Président tient à les remercier et leur souhaite bon travail. Il demande à l'Assemblée générale de bien vouloir approuver ces deux nominations pour un terme de 3 ans. Le premier B-Stat News (N° 36) de la nouvelle équipe est sorti de presse et a été envoyé à tous les membres.
- Le site web de la Société a été maintenu à jour par Laurence Seidel (ULg) qui ne manque pas de communiquer par email aux membres de la Société toute information intéressante (annonces de conférence ou de workshop, offres d'emploi, vacances de cours, etc.). Les membres du CA remercient L. Seidel de son aide efficace.
- La 13<sup>e</sup> réunion annuelle de la SBS-BVS s'est tenue à Oud Turnhout dans le cadre du merveilleux site du « Priorij van Corsendonk », les 14 et 15 octobre 2005, et ce à l'initiative des statisticiens de l'Université de Gand. En particulier, le Président tient à remercier Olivier Thas qui a été la cheville ouvrière du comité d'organisation. Ce Congrès a compté 124 participants, 9 conférenciers invités, 26 présentations orales et 11 posters. Elle fut organisée, pour la première fois, conjointement avec d'autres sociétés scientifiques: la Société A. Quetelet, le « RSS-3CC local group » et b-ENBIS. Dans l'ensemble, cette association s'est avérée être un succès malgré le

fait qu'il était parfois difficile d'opérer un choix entre deux sessions parallèles où intervenaient au même moment des conférenciers de renom. Le Président tient à féliciter Olivier Thas et l'équipe de Gand pour cette réunion annuelle réussie et relevée au niveau scientifique.

- L'organisation de la 14<sup>e</sup> réunion annuelle, initialement confiée aux Facultés Universitaires Notre-Dame de la Paix à Namur (FUNDP), a dû être transférée à l'UCL pour des raisons internes aux FUNDP. Le Président tient à remercier Christian Ritter (UCL), membre du CA, Jean-Marie Rolin et l'Institut de Statistique de Louvain-la-Neuve d'avoir accepté cette tâche au pied levé. Il annonce que le Congrès annuel se déroulera les jeudi 13 et vendredi 14 octobre 2006 à Houffalize. Il est envisagé d'organiser une réunion spéciale pour les jeunes statisticiens le mercredi 12 après-midi. En principe, les Facultés de Namur devraient organiser la réunion annuelle en 2008.
- En 2005, la SBS-BVS a subsidié plusieurs événements scientifiques, en particulier le « European Course in Advanced Statistics (ECAS) » qui a eu lieu du 12 au 16 septembre 2005 à La Roche-en-Ardennes, ainsi qu'une exposition sur les « 120 Belges les plus célèbres » au Château de Beloeil (Château des Célébrités) du 16 septembre au 20 novembre 2005. En particulier, la SBS-BVS a soutenu la personnalité d'Adolphe Quetelet (1796-1874), père de la statistique sociale, de l'indice de masse corporelle et de l'homme « moyen ».
- La situation financière de la Société est saine. Le Président tient à remercier Marc Aerts (trésorier) et Hilde Wijnen (UHasselt) de leur aide efficace. Le CA réfléchit actuellement sur des propositions visant à mieux valoriser les moyens financiers au profit des membres. Plusieurs pistes ont été évoquées :
  - Promotion des statistiques via un prix pour la meilleure thèse de doctorat
  - Aide financière aux jeunes chercheurs
  - Soutien accru à la section Biostatistique qui est très active
  - Augmentation du sponsoring des événements scientifiques (annuellement  $4 \times 750$  € au lieu de  $2 \times 750$  €)
  - Développement de projets visant à ouvrir les statistiques à un plus large public
- Enfin, le Président tient à exprimer sa sympathie envers les membres de l'Institut de Statistique de l'ULB. Celui-ci vit actuellement des heures difficiles après plus de 40 années d'existence. Il souligne la

contribution exceptionnelle que l’Institut a apportée à la statistique non seulement sur le plan national mais aussi international.

### **2bis. Rapport moral et rapport d'activités de la section biostatistique**

Ph. Lambert présente les activités de la Section "Biostatistique" de la Société.

- Activités organisées, co-organisées ou soutenues par la Section
  - Dr. N. Best (Dpt of Epidemiology & Public Health, Imperial College, London, UK) a été invité à donner le cours intitulé "An introduction to Bayesian inference in biomedical applications" à Louvain-la-Neuve (Eli Lilly Development Center) les 3 et 4 mai 2005. Vingt-sept personnes ont participé à ce cours.
  - La section a organisé le 16 novembre 2005 dans les locaux de EORTC (Brussels) un cours d'une journée dont le professeur invité était Dr. B. Beck (European Early Phase Statistic department, Eli Lilly, Belgium). Le sujet était consacré au thème suivant "Practical Bayesian modelling with BUGS / BRUGS/ CODA / WBDIFF in pharmaceutical R&D" et vingt personnes y ont assisté.
  - Le 17 novembre 2005, la Section a organisé un workshop sur un sujet similaire, "Bayesian inference in biomedical applications", pendant lequel plusieurs orateurs étrangers sont intervenus. Cette activité s'est déroulée à EORTC et 21 personnes y ont participé.
- Activités relatives à la EFSPI (European Federation of Statisticians in the Pharmaceutical Industry):
  - La Section est représentée à la EFSPI par deux membres (C. Dubois et B. Boulanger).
  - C. Dubois a la responsabilité de rassembler et transmettre toute information sur des événements se déroulant en Belgique et pouvant être intéressants pour les membres de la EFSPI.
  - B . Boulanger a participé à l'*International workshop on statistical methodology in clinical and nonclinical R&D* (26-28 octobre 2005, Nice, France). Il faisait d'ailleurs partie du comité scientifique.

– Activités prévues

- Elections : B. Boulanger et Ph. Lambert sont arrivés au terme de leur mandat. Un membre académique et un membre de l'industrie pharmaceutique devront être élus pour un nouveau mandat de 4 ans. Un appel à candidature a été envoyé à tous les membres de la Section début février et la date limite pour postuler est le 5 mars 2006. Les votes seront clôturés et dépouillés lors de l'Assemblée générale de la section au printemps 2006.
  - BSS2006 : la section prévoit d'organiser une session et d'inviter un orateur lors du congrès annuel de la SBS-BVS du mois d'octobre 2006.
  - D'autres activités seront annoncées dans le courant de l'année
- Rapport financier: Il sera présenté lors de l'Assemblée générale de la Section au printemps 2006.

Le vote est fait sur ces rapports et l'Assemblée Générale donne décharge au Président et au Conseil sur ce point.

### **3. Rapport financier**

Les comptes de l'année 2005 sont présentés et détaillés par le trésorier M. Aerts. Ceux-ci se finalisent par un bénéfice assez important de 12.597,03 €.

Vu l'état actuel des comptes qui, au 31/12/2005, s'élèvent à 78.730,96 €, on peut conclure que la SBS-BVS se trouve dans une situation financière très confortable.

Le vote est fait sur ce rapport. Ces comptes sont approuvés à l'unanimité.

### **4. Rapport du Secrétaire**

En 2005, 290 membres ont payé leur cotisation. Ce sont ces membres qui seront officiellement repris sur la liste des membres de la Société. En effet, selon la nouvelle loi régissant les ASBL, une liste des membres doit être officiellement établie et fournie aux greffes chaque année. La secrétaire signale que dorénavant, cette liste ne sera constituée que des personnes en ordre de paiement pour le 31 décembre de l'année en question.

Par ailleurs, parmi les personnes n'étant pas en règle de cotisation en 2005, 23 n'ont pas payé depuis au moins deux années. Ces membres ont été contactés à plusieurs reprises par le secrétariat afin de leur demander de se

mettre en ordre de cotisation. Sans réponse de leur part et ce, conformément aux statuts de la Société, l'Assemblée Générale procède à leur radiation.

## **5. Admission de nouveaux membres**

Au cours de l'année 2005, 26 membres ont été admis par le Conseil. Il s'agit de:

*Bart AMPE (Ghent University), Kaatje BOLLAERTS (Universiteit Hasselt), Toufif BOUEZMARNI (KULeuven), Andreas CHRISTMANN (Vrije Universiteit Brussel), Hans COPPENOLLE (Janssen Pharmaceutica), Julia DONY (VUB), Maria José GARCIA ZATTERA (KULeuven), Sarah GELPER (KULeuven), Klara GOETHALS (Ghent University), Alejandro JARA VALLEJOS (KULeuven), Astrid JULLION (UCL), Dan LIN (Universiteit Hasselt), John T. MARINGWA (Universiteit Hasselt), Paul MEYVISCH (UCB), Roger MOORE (Eli Lilly & Co. Ltd.), Harriet NAMATA (Universiteit Hasselt), Florence NOZAY (Glaxo SmithKline Biologicals), Virginie PAUTRET (BMS), Réjane ROUSSEAU (UCL), Sarah RUSCH (Johnson & Johnson Pharmaceuticals R&D), Filomena VALENTE SOARES (Ecole de Santé publique, ULB), Yuik SWAN (ULB), Johan VAN KERCKHOVEN (KULeuven), Tim VERDONCK (Universiteit Antwerpen), Kristien WOUTERS (Universiteit Hasselt), Lixin ZHANG (ULg).*

Il faut de plus ajouter 8 nouveaux membres admis lors de la présente Assemblée Générale, à savoir

*Emilie BARRE (Bristol Myers Squibb), Saghir BASHIR, Stephen FRANCIS (Bristol-Myers Squibb), Yuri GOEGEBEUR (University of Southern Denmark), Delphine HENNICKEN (Bristol-Myers Squibb), Roxana Alice ION (Janssen Pharmaceutica), Javier SAWCHIK (UCB), Willem TALLOEN (Janssen Pharmaceutica).*

L'Assemblée générale ratifie ces nouvelles admissions.

## **6. Admission de nouveaux membres institutionnels**

Il n'y a pas eu d'admission de nouveaux membres institutionnels en 2005. Il semble utile de préciser ici que, bien que l'Institut National de Statistique verse chaque année un montant de 2500 € à la Société, cela ne correspond pas au paiement d'une cotisation en tant que membre institutionnel mais à un don.

## **7. Etat du *B-Stat News***

Ainsi que déjà signalé dans le rapport d'activité du Président, M. Hubert et Ph. Lambert ont désiré arrêter la charge éditoriale du *B-Stat News* et le conseil d'administration a dès lors pourvu à leur remplacement. Le Président demande l'accord de l'Assemblée Générale pour confirmer la nomination des deux nouveaux éditeurs : S. Vanbelle et O. Thas. Le vote est favorable à l'unanimité.

## **8. Préparation de la réunion annuelle 2006**

Ch. Ritter donne les grandes lignes de l'organisation de la réunion annuelle d'octobre 2006. Elle aura lieu à Houffalize les jeudi 12 et vendredi 13 octobre 2006. Elle sera précédée d'un après-midi scientifique réservé aux jeunes statisticiens pendant lequel seront prévus, entre autres, des présentations de posters, des témoignages de jeunes docteurs ayant récemment entamé une carrière dans le secteur privé, ... Le comité organisateur de l'UCL envisage d'offrir cette activité supplémentaire aux jeunes qui présenteront un exposé lors du congrès.

En ce qui concerne le programme des deux autres journées, il y aura 5 conférenciers renommés invités à présenter leur travaux lors de sessions plénières. Il y aura aussi 3 périodes pendant lesquelles deux sessions parallèles seront prévues. Pour chacune de ces sessions parallèles, le comité organisateur prévoit une session dédiée aux matières théoriques de statistique mathématique et l'autre consacrée plutôt aux applications. La réunion se terminera le vendredi après le repas de midi. Les participants auront alors la possibilité de profiter d'une activité sociale ou encore, de s'inscrire à un workshop dont le thème sera lié au data-mining.

Comme l'année passée, il est prévu d'inviter d'autres sociétés à participer à l'organisation. La section biostatistique ainsi que les sociétés « RSS-3CC local group » et b-ENBIS sont déjà impliquées. La Société Quetelet doit encore être contactée.

A ce sujet, A. Albert profite de la présence de M. Vandebroek, représentante nationale de la Société b-Enbis jusqu'en 2005, pour avoir son avis sur l'organisation conjointe du congrès d'octobre 2005. Elle regrette le peu de participants venant des industries et espère que cette situation va évoluer favorablement avec le choix d'organiser le congrès le jeudi et le vendredi au lieu du vendredi et du samedi. Plusieurs membres académiques présents signalent cependant que, si le jeudi et le vendredi conviennent mieux aux participants provenant du secteur privé, cela perturbe par ailleurs

énormément l'activité d'enseignement des membres académiques de la SBS. Pour conclure ce point, Ch. Ritter note que l'UCL avait déjà privilégié ce choix de jour lors de l'organisation du congrès en 2000.

Ch. Ritter termine son rapport en rappelant que SAS organise chaque année une journée de formation le jeudi de la même semaine que celle du congrès SBS. Il serait peut être judicieux de leur demander de changer de semaine afin de ne pas se faire concurrence.

#### **9. Etat sur le sponsoring de la SBS-BVS**

La SBS-BVS apporte son support (financier ou non) à l'organisation de conférences, ateliers, cours ou séminaires, afin de stimuler et de soutenir la statistique dans le pays. Elle souhaite ainsi offrir à ses membres des réductions de droit d'inscription à ces rencontres scientifiques. Dans son rapport, le Président a déjà mentionné les octrois offerts en 2005. Aucune demande n'a été reçue pour le moment pour l'année 2006. Il est rappelé que le nombre d'activités sponsorisées par an par la Société vient d'être augmenté : 4 x 750 € sont maintenant disponibles. Un rappel concernant cette possibilité de sponsoring va être envoyé à tous les membres de la Société.

#### **10. Cotisation annuelle pour l'an 2007**

Pour l'année 2007, l'Assemblée Générale propose de ne pas modifier le montant des cotisations annuelles, à savoir :

- Membre ordinaire: 40 €
- Etudiant et membre retraité: 20 €.

De plus, les membres qui s'inscrivent conjointement à la SBS-BVS et à la Société Quetelet bénéficient d'une réduction de 15 €.

Pour les membres institutionnels, la cotisation annuelle minimale est fixée à 625 €.

#### **11. Activités futures de la Société**

Le Président invite les membres à consulter le site web de la Société puisque les activités futures de la Société ainsi que les prochains événements 'statistiques' en Belgique y sont mentionnés.

## **12. Divers**

- Paul Janssen informe l’Assemblée que le centre de statistique (CenStat) de l’Université de Hasselt et l’Institut de Statistique de l’UCL organisent conjointement le 19 mai 2006 un colloque dans le cadre du réseau IAP. Le thème est consacré à l’analyse de survie et les quatre conférenciers suivants ont été invités : M. Akritas, J. de Uña Alvarez, A. Janssen et Y. Li.
- A. Albert invite les membres présents à soumettre des contributions personnelles aux éditeurs de B-Stat News. Il suggère par exemple à M. Hallin de rédiger un bref article sur les leçons qu’il a données dans le cadre de la Chaire Francqui au titre belge que la Fondation Francqui lui a attribuée cette année.\_

Le Président remercie au nom de tous la KUL et Irène Gijbels en particulier pour l’accueil et pour l’organisation des conférences qui ont précédé la réunion. Le Président remercie ensuite l’Assemblée Générale et clôt la séance à 18h15.

Pr. G. Haesbroeck  
Secrétaire

Pr. A. ALbert  
Président

## **VERSLAGEN VAN DE ALGEMENE VERGADERINGEN**

### **Algemene Vergadering van 22 februari 2006 om 17u in de Katholieke Universiteit Leuven**

*Aanwezigen:* M. Aerts, A. Albert, C. Dehon, G. Haesbroeck, M. Hallin, P. Janssen, P. Lambert, W. Rey, Ch. Ritter, P. Slock, J. Teugels, M. Vandebroek.

*Verontschuldigd:* L. Bijnens, T. Bruss, J.J. Claustriaux, P. Dagnelie, U. Einmahl, I. Gijbels, J. Loris-Teghem, D. Renard, H. Van Oyen.

De vergadering wordt geopend om 17u15.

#### **1. Goedkeuring van het verslag van de Algemene Vergadering van 24 februari 2005**

Het verslag dat gepubliceerd werd in *B-Stat News* N°34 van mei 2005 wordt ongewijzigd goedgekeurd.

#### **2. Verslag van de Voorzitter en activiteitenverslag**

De voorzitter A. Albert maakt de balans op van de activiteiten van het jaar 2005, het eerste jaar van zijn mandaat als voorzitter.

- De Raad van Bestuur van de Vereniging kwam driemaal samen in het jaar 2005, respectievelijk op 9 mei, op 4 oktober en op 6 december, in het NIS te Brussel. A. Albert maakt van de gelegenheid gebruik om – in naam van de leden van de Raad van Bestuur – het NIS te bedanken voor de geboden gastvrijheid.

Zoals hij geschreven heeft in zijn editoriaal van het januari 2006 nummer van *B-Stat-News* betreurt de voorzitter dat het Nationaal Instituut voor de Statistiek momenteel doorheen een moeilijke periode gaat omwille van een interne reorganisatie. In feite is het Nationaal Instituut voor de Statistiek één van de algemene directies geworden van de Federale Overheidsdienst Economie, KMO en Middenstand (*Algemene Directie Statistiek en Economische Informatie*). De BVS-SBS heeft de verzekering gekregen dat zij haar vergaderzetel kan behouden op het NIS (Leuvensestraat 44), de vergaderingen van de Raad van Bestuur blijven dus doorgaan in de Quetelet zaal van het NIS

en de vereniging mag blijven rekenen op de jaarlijkse financiële steun van 2.500 EURO.

- Het ledenaantal van de Vereniging bedraagt 342. In de loop van 2005 zijn 26 nieuwe leden toegetreden tot de Vereniging en op de algemene vergadering van 22 februari 2006 zijn daar nog acht extra leden bijgekomen; dus een totaal van 34 nieuwe leden in 2005. Anderzijds zijn een aantal leden van de ledenlijst geschrapt omdat zij niet in orde zijn met de betaling van hun lidgeld. De regels dienaangaande, die gelden voor VZW's, zijn strenger geworden en het is belangrijk ons aan die regels te houden. G. Haesbroeck heeft al het mogelijke gedaan om de leden met achterstallige betaling van de lidgelden tot betaling aan te manen en de Raad van Bestuur dankt haar voor deze inspanning.
- Volgens plan verschenen drie nummers van *B-Stat News* in 2005 (N° 33, 34, 35). De Raad van Bestuur heeft moeten voorzien in een vervanging van de twee uitgevers van *B-Stat News*, Mia Hubert (KUL) en Philippe Lambert (UCL). Na vier jaar loyale en trouwe dienst hebben zij de wens uitgesproken om van deze taak onslagen te worden. De Voorzitter houdt eraan hen hartelijk te bedanken voor het vele kwaliteitsvolle werk dat zij hebben gedaan. Tijdens hun mandaat zijn zij erin geslaagd om het tijdschrift dat in 1992 werd opgestart op een goed niveau aan te bieden. In 2005 heeft de Raad van Bestuur twee nieuwe uitgevers voor *B-Stat News* benoemd: Olivier Thas (UGent) en Sophie Vanbelle (ULg). De Voorzitter dankt hen en wenst hen succes toe in hun werk. Hij vraagt de Raad van Bestuur deze benoeming goed te keuren voor een periode van drie jaar. Het eerste nummer van *B-Stat News* (No 36), dat gemaakt werd door deze nieuwe ploeg, is inmiddels gedrukt en is naar alle leden verzonden.
- De webstek van de Vereniging werd met zorg onderhouden door L. Seidel. De Voorzitter dankt haar voor het geleverde werk. Zij is erin geslaagd om de webstek op een zeer accurate en efficiënte manier te onderhouden, zodat vlot gecommuniceerd kan worden omtrent alle informatie die interessant is voor de leden van de Vereniging (aankondigingen van conferenties en workshops, jobaanbiedingen, zomercursussen, enz.).
- De 13de jaarlijkse bijeenkomst van de BVS-SBS is op 14 en 15 oktober 2005 gehouden in Oud-Turnhout in de mooie omgeving van de « Priorij van Corsendonk ». De organisatie was in handen van de statistici van de Universiteit Gent. In het bijzonder wenst de Voorzitter Olivier Thas te bedanken die de spilfiguur was binnen het organiserend comité. De bijeenkomst telde 124 deelnemers waarvan negen uitgenodigde

sprekers; er waren 26 mondelinge presentaties en 11 posters. Voor de eerste maal werd de bijeenkomst georganiseerd samen met andere wetenschappelijke verenigingen: de A. Quetelet Vereniging, de lokale RSS-3CC groep en b-ENBIS. Globaal gezien is deze gezamenlijke organisatie een succes te noemen ondanks het feit dat het soms moeilijk kiezen was tussen de parallelle activiteiten waar op hetzelfde moment gerenomeerde sprekers voordrachten gaven. De Voorzitter wenst Olivier Thas en zijn Gentse ploeg te danken voor het organiseren van een geslaagde bijeenkomst van goed wetenschappelijk niveau.

- De organisatie van de 14de jaarlijkse bijeenkomst, die initieel werd toevertrouwd aan de Facultés Universitaires Notre-Dame de la Paix te Namen (FUNDP), is nu in handen gegeven van de UCL omwille van interne oorzaken binnen de FUNDP. Christian Ritter (UCL), lid van de Raad van Bestuur van de Vereniging, Jean-Marie Rolin en het Institut de Statistique van Louvain-la-Neuve hebben aanvaard om alsnog de organisatie op zich te nemen. Christian Ritter kondigt aan dat de bijeenkomst zal plaats vinden op donderdag 13 en vrijdag 14 oktober 2006 in Houffalize. Er wordt ook voorzien om op woensdag 12 oktober in de namiddag een speciale sessie te organiseren voor de jonge statistici. In principe zal de FUNDP de bijeenkomst van 2008 organiseren.
- In 2005 heeft de BVS-SBS een aantal wetenschappelijke evenementen gesteund, in het bijzonder de « European Course in Advanced Statistics (ECAS) » die plaats vond van 12 tot 16 september 2005 in La Roche-en-Ardennes, alsook een tentoonstelling over « de 120 meest beroemde Belgen » in het Kasteel van Beloeil (Château des Célébrités) van 16 september tot 20 november 2005. Meer bepaald heeft de BVS-SBS financiële steun gegeven om de personaliteit van Adolphe Quetelet (1796-1874) in de schijnwerpers te zetten. Hij is de vader van de sociale statistiek, van de bodymass index en van de “gemiddele” mens.
- De financiële situatie van de Vereniging is gezond. De Voorzitter dankt Mark Aerts (schatbewaarder) en Hilde Wijnen (UHasselt) voor hun efficiënt werk. De Raad van Bestuur houdt momenteel een reflexie over het beter aanwenden van de beschikbare middelen ten voordele van de leden. Verschillende denkpistes worden afgetast.
  - Het promoten van statistiek via het toekennen van een prijs voor de beste doctoraatsthesis
  - Financiële steun voor jonge onderzoekers
  - Verhoogde steun voor de sectie Biostatistiek die erg actief is

- Het vermeerderen van de steun voor wetenschappelijke evenementen (4 X 750 EURO per jaar in plaats van 2 X 750 EURO per jaar)
- Het ontwikkelen van projecten die statistiek meer zichtbaar maken voor het grote publiek
- Tenslotte spreekt de Voorzitter zijn genegenheid uit ten aanzien van de leden van het Institut de Statistique van de ULB. Zij kennen momenteel moeilijke momenten na een activiteit van meer dan 40 jaar. Hij beklemtoont dat het Instituut uitzonderlijke bijdragen heeft geleverd voor de statistiek zowel op nationaal als op internationaal vlak.

## **2bis. Verslag van de voorzitter en activiteitenverslag van de sectie Biostatistiek**

Ph. Lambert stelt de activiteiten voor van de sectie 'Biostatistiek' van de Vereniging.

- De Sectie organiseerde, co-organiseerde of steunde de volgende activiteiten:
  - Dr. N. Best (Dept of Epidemiology & Public Health, Imperial College, London, UK) werd uitgenodigd voor het geven van de cursus "An introduction to Bayesian inference in biomedical applications" in Louvain-la-Neuve (Eli Lilly Development Center) op 3 en 4 mei 2005. Het aantal deelnemers aan deze cursus bedroeg 25.
  - Op 16 november 2005 organiseerde de Sectie een cursus van één dag, die doorging op het EORTC (Brussel). Prof. dr. B. Beck (European Early Phase Statistic Department, Eli Lilly, Belgium) gaf lezingen omtrent het thema "Practical Bayesian modelling with BUGS / BRUGS/ CODA / WBDIFF in pharmaceutical R&D". Twintig personen namen deel aan deze activiteit.
  - Op 17 november 2005 organiseerde de Sectie op het EORTC een workshop met als titel "Bayesian inference in biomedical applications". Een aantal buitenlandse sprekers leverden een bijdrage tijdens deze dag, die werd bijgewoond door 21 deelnemers.
- Activiteiten in het kader van de EFSPi (European Federation of Statisticians in the Pharmaceutical Industry):

- De Sectie is binnen de EFSPI vertegenwoordigd door twee leden (C. Dubois et B. Boulanger).
- C. Dubois heeft als taak om informatie te verzamelen en door te spelen omtrent evenementen die in België doorgaan en die interessant kunnen zijn voor de leden van de EFSPI.
- B . Boulanger nam deel aan de *International Workshop on Statistical Methodology in Clinical and Nonclinical R&D* (26-28 oktober 2005, Nice, Frankrijk). Hij maakte ook deel uit van het wetenschappelijk comité.
- Geplande activiteiten
  - Verkiezingen : B. Boulanger en Ph. Lambert zijn aan het einde van hun mandaat gekomen. Een academisch lid en een lid dat actief is in de farmaceutische industrie moeten verkozen worden voor een periode van vier jaar. Een oproep tot kandidaatstelling is gestuurd naar alle leden van de Sectie en de deadline voor kandidaatstelling is 5 mei 2006. De stemmen zullen verzameld en geteld worden tijdens de volgende Raad van Bestuur in de lente van 2006.
  - BSS2006 : de sectie zal een activiteit organiseren met een uitgenodigde spreker naar aanleiding van het jaarlijks congres van de BVS-SBS in oktober 2006.
  - Andere activiteiten zullen aangekondigd worden in de loop van het jaar.
- Financieel rapport : het financieel rapport zal voorgesteld worden tijdens de bijeenkomst van de Raad van Bestuur in de lente van 2006.

De beschikbare rapporten worden goedgekeurd door de Algemene Vergadering en decharge wordt verleend aan de Voorzitter van de Sectie en aan de Raad van Bestuur.

### **3. Financieel verslag**

De rekeningen van 2005 worden voorgesteld en geduid door de schatbewaarder M. Aerts.  
Ze vertonen een batig saldo van 12.597,03 EURO.

Gezien de stand van de rekeningen op 31 december 2005 resulteert in een batig saldo van 78.730,96 EURO, kan men besluiten dat de BVS-SBS zich in een gunstige financiële situatie bevindt.

Het verslag wordt bij stemming unaniem goedgekeurd door de Algemene Vergadering.

#### **4. Verslag van de secretaris**

In 2005 betaalden 290 leden hun lidgeld. Dat zijn de leden die officieel vermeld staan op de ledenlijst van de Vereniging. Immers, volgens de nieuwe reglementen omtrent VZW's, moet jaarlijks een ledenlijst worden neergelegd op de Griffie. De secretaris deelt mee dat voortaan deze lijst enkel de personen zal bevatten die voor 31 december van het betreffende jaar hun lidgeld hebben betaald.

Verder is het zo dat van de personen die in 2005 hun lidgeld niet betaalden er 23 zijn die op zijn minst twee jaar niet hebben betaald. Deze personen zijn herhaaldelijk gecontacteerd door het secretariaat met de vraag zich in orde te stellen voor wat betreft de betaling van het lidgeld. Bij gebrek aan reactie van hun zijde en conform de statuten van de Vereniging, beslist de Algemene Vergadering om deze personen van de ledenlijst te schrappen.

#### **5. Toelating van nieuwe leden**

In het jaar 2005 zijn 26 nieuwe leden toegelaten door de Raad, met name:

*Bart AMPE (Universiteit Gent), Kaatje BOLLAERTS (Universiteit Hasselt), Toufif BOUEZMARNI (KULeuven), Andreas CHRISTMANN (VUB), Hans COPPENOLLE (Janssen Pharmaceutica), Julia DONY (VUB), Maria José GARCIA ZATTERA (KULeuven), Sarah GELPER (KULeuven), Klara GOETHALS (Universiteit Gent), Alejandro JARA VALLEJOS (KULeuven), Astrid JULLION (UCL), Dan LIN (Universiteit Hasselt), John T. MARINGWA (Universiteit Hasselt), Paul MEYVISCH (UCB), Roger MOORE (Eli Lilly & Co. Ltd.), Harriet NAMATA (Universiteit Hasselt), Florence NOZAY (Glaxo SmithKline Biologicals), Virginie PAUTRET (BMS), Réjane ROUSSEAU (UCL), Sarah RUSCH (Johnson & Johnson Pharmaceuticals R&D), Filomena VALENTE SOARES (Ecole de Santé Publique, ULB), Yuik SWAN (ULB), Johan VAN KERCKHOVEN (KULeuven), Tim VERDONCK (Universiteit Antwerpen), Kristien WOUTERS (Universiteit Hasselt), Lixin ZHANG (ULg).*

Bovendien moeten 8 nieuwe leden worden toegevoegd die toegelaten worden tijdens de huidige Algemene Vergadering, met name :

*Emilie BARRE (Bristol-Myers Squibb), Saghir BASHIR, Stephen FRANCIS (Bristol- Myers Squibb), Yuri GOEGEBEUR (University of Southern Denmark), Delphine HENNICKEN (Bristol-Myers Squibb), Roxana Alice ION (Janssen Pharmaceutica), Javier SAWCHIK (UCB), Willem TALLOEN (Janssen Pharmaceutica).*

De Algemene Vergadering keurt de lijst van nieuwe leden goed.

## **6. Toelating van nieuwe institutionele leden**

Er zijn geen nieuwe institutionele leden in 2005.

Het is nuttig om hier op te merken dat het bedrag van 2500 EURO dat jaarlijks door het NIS wordt betaald geen lidgeld is in de hoedanigheid van institutioneel lid maar dat het gaat over een gift.

## **7. Toestand van *B-Stat News***

Zoals reeds gemeld door de Voorzitter hebben Mia Hubert en Philippe Lambert de wens uitgesproken ontheven te worden van hun taak als uitgevers van *B-Stat News* en is reeds voorzien in hun vervanging. De Voorzitter vraagt de Algemene Vergadering om de aanstelling van de twee nieuwe uitgevers goed te keuren: Sophie Vanbelle en Olivier Thas. De raad stemt unaniem gunstig.

## **8. Voorbereiding van de jaarlijkse bijeenkomst 2006**

Christian Ritter schetst in grote lijnen de organisatie van de bijeenkomst van oktober 2006. De bijeenkomst zal plaats vinden in Houffalize op donderdag 12 en vrijdag 13 oktober. Zij zal worden voorafgegaan door een wetenschappelijke namiddag voor de jonge statistici. Daar worden onder meer posters voorgesteld, getuigenissen van jonge doctors die recent een loopbaan gestart zijn in de privé sector, ...

Het organiserend comité van de UCL voorziet om deze activiteit aan te bieden aan jongeren die een presentatie willen geven tijdens het congres.

Het programma tijdens de twee dagen van het congres wordt als volgt samengesteld: er zullen vijf gerenomeerde uitgenodigde sprekers zijn die hun werk zullen voorstellen in plenaire sessies tijdens het congres. Er zullen ook drie momenten zijn waarop parallelle sessies worden georganiseerd. Tijdens elk van deze sessies zal het organiserend comité een sessie voorzien die handelt over methodologie van de wiskundige statistiek en een toegepaste sessie. De bijeenkomst zal eindigen vrijdag na de lunch. De deelnemers kunnen dan eventueel nog deelnemen aan een sociale activiteit of kunnen zich inschrijven voor een workshop over data-mining.

Zoals vorig jaar is voorzien dat andere verenigingen deelnemen aan de organisatie. De Sectie Biostatistiek en de verenigingen RSS-3CC en b-ENBIS zijn reeds actief betrokken. De Quetelet vereniging moet nog worden gecontacteerd.

Dienaangaande maakt A. Albert gebruik van de aanwezigheid van M. Vandebroek, nationaal vertegenwoordiger van de b-NBIS vereniging, om te informeren naar haar idee over de co-organisatie van de bijeenkomst van oktober 2005. Zij betreurt het gering aantal deelnemers vanuit de industrie en hoopt dat, door het organiseren van de volgende bijeenkomst op een donderdag en een vrijdag, dit euvel kan verholpen worden.

Verschillende academische leden signaleren dat, alhoewel donderdag en vrijdag misschien beter is voor deelnemers uit de industrie, dit een probleem kan geven voor hun onderwijskalender. De discussie wordt afgesloten door Ritter die opmerkt dat de UCL de voorkeur voor donderdag en vrijdag al heeft aangewend bij de organisatie van de bijeenkomst in 2000.

Christian Ritter meldt tenslotte dat SAS elk jaar een vormingsdag organiseert op donderdag van dezelfde week als de BVS-SBS bijeenkomst. Het lijkt nuttig om SAS te vragen om een andere week te kiezen voor hun activiteit om concurrentie te vermijden.

## **9. Sponsoring van BVS/SBS**

De BVS-SBS verleent haar steun (financieel of niet) aan de organisatie van conferenties, workshops, cursussen en seminars, teneinde de statistiek in het land te stimuleren en te ondersteunen. Aldus wenst de BVS-SBS aan haar leden een korting te verlenen op de inschrijvingsgelden voor deze wetenschappelijke bijeenkomsten. In dit verslag heeft de Voorzitter reeds de sponsoring vermeld voor 2006. Op dit moment zijn voor 2006 nog geen aanvragen voor steun binnengekomen. We herinneren eraan dat het aantal activiteiten dat gesteund wordt door de Vereniging stijgt: 4 X 750 EURO per jaar zijn nu beschikbaar. Een memo over deze nieuwe mogelijkheid zal gestuurd worden naar alle leden van de Vereniging.

## **10. Jaarlijks lidgeld voor 2007**

Voor het jaar 2007 stelt de Algemene Vergadering voor het lidgeld niet te veranderen en vast te leggen op

- Gwoon lid: 40 €
- Studenten en gepensioneerden: 20 €.

Bovendien genieten de leden die tegelijk lid worden van BVS-SBS en de Quetelet Vereniging een korting van 15 €.

## **11. Toekomstige activiteiten van de Vereniging**

De Voorzitter nodigt de leden uit om de webstek van de Vereniging te raadplegen omdat informatie over de toekomstige activiteiten van de Vereniging alsook over een aantal andere statistische evenementen in België daar te vinden zijn.

## **12. Varia**

- Paul Janssen informeert de Algemene Vergadering dat het Centrum voor Statistiek van de UHasselt en het Institut de Statistique van de UCL gezamenlijk een colloquium, dat past binnen het IUAP netwerk, organiseren op 19 mei 2006. Het thema van de dag is “overlevingsanalyse”. De vier uitgenodigde sprekers zijn : M. Akritas, J. de Uña Alvarez, A. Janssen en Y. Li.
- A. Albert nodigt de leden uit om persoonlijke bijdragen te leveren aan de uitgevers van *B-Stat News*. Hij suggereert bijvoorbeeld dat M. Hallin een korte bijdrage zou leveren over de colleges die hij heeft gegeven in het kader van de Francqui leerstoel (Marc Hallin was houder van de Belgische Francqui leerstoel in 2005).

De Voorzitter dankt in aller naam de KUL en in het bijzonder Irène Gijbels voor de ontvangst en voor de organisatie van de lezingen die vooraf gingen aan de Algemene Vergadering.

De Voorzitter dankt ook de Algemene Vergadering en sluit de zitting om 18u15.

Pr. G. Haesbroeck  
Secretaris

Pr. A. ALbert  
Voorzitter

## **14<sup>TH</sup> ANNUAL MEETING OF THE BELGIAN STATISTICAL SOCIETY SBS-BVS**

**October (11), 12 and 13, 2006, Houffalize**

The 14<sup>th</sup> annual meeting of the Belgian Statistical Society (BSS) will be organised by the Institute of Statistique of UCL (Louvain-la-Neuve, Belgium) and will be held on October (11<sup>th</sup>), 12<sup>th</sup> and 13<sup>th</sup> in Ol Fosse d'Outh in Houffalize. This meeting is jointly organised with three other statistical societies: B-ENBIS, RSS-3cc and the Quetelet Society.

Some specials events:

- The first day (October 11) will be devoted to a **special afternoon for young statisticians**.
- The meeting will offer, in parallel, methodological and applied sessions during the two days of the conference to reflect the diversity of the Belgian statistical community.
- The meeting will “officially” be closed on Friday after lunch but a hand-on workshop and a hike will be organised on that afternoon.

Invited speakers include:

Bart Baesens (KULeuven), Dave Collett (UK Transplant, UK), Erich Neuwirth (University of Vienna, Austria), Jean Opsomer (Iowa State University, USA), Jean-François Richard (University of Pittsburgh, USA).

More information and instructions on how to register and submit abstracts can be found on

<http://www.stat.ucl.ac.be/BSS2006>

Early registration and abstract submission are now open !

The major deadlines are:

- May 1<sup>st</sup>: Start of reduced fee registration and abstract submission.
- July 1<sup>st</sup>: Closing of abstract submission.
- July 15: Notification of paper (poster) acceptance by the scientific committee.
- August 30: Closing of reduced fee registration.
- September 30: Closing of normal registration.

## **ANNOUNCEMENTS**

### **FIRST LEUVEN STATISTICAL DAY**

**KU Leuven, June 12, 2006**

A large variety of applied and theoretical statistical research is performed at the K.U. Leuven. The aim of the annual Leuven Statistical Day is to highlight this research, not only to our colleagues but to a wide audience. However, it is impossible to illustrate all statistical activity at our university in one day and therefore we decided to select each year a different topic. This year we have chosen Mixed Models as a common theme. This class of models enjoys a growing interest, both from a theoretical as from an applied point of view. The keynote lecture at our first Leuven Statistical Day is given jointly by Geert Verbeke and Geert Molenberghs. Both are internationally recognized for their books on mixed models and longitudinal data. Their lecture will first review the basic material on linear, generalized linear and non-linear mixed models. In the second half of the lecture, they will treat the more novel aspects of mixed models. After the keynote lecture, a number of K.U.Leuven researchers from different faculties will present their research on mixed models and illustrate their richness in a variety of areas of application.

#### **Programme:**

**8.30 Registration and Coffee**

**9.15 Opening**

**Session 1, Chair: E. Lesaffre**

**9.30 Opportunities and Challenges in Mixed Models and Incomplete Data,  
*G. Verbeke, G. Molenberghs***

**11.00 Coffee Break**

**Session 2, Chair: M. Lacante**

**11.30 Attitudes towards Migration in Europe: a Cross-Cultural and  
Contextual Approach, *B. Meuleman***

**12.00 A Double-Structure Structural Equation Model for Three-Mode Data,  
*J. González, P. De Boeck, F. Tuerlinckx***

**12.30** Mixed Models for Postharvest Quality Assessment of Horticultural products, *B. De Ketelaere, J. Lammertyn*

### **13.00 Free Lunch**

**Session 3**, Chair: A. Carbonez

**14.00** Using Mixed Models in Actuarial Statistics, *K. Antonio*

**14.30** The impact of Education on Third Births. A Multilevel Discrete-Time Hazard Analysis, *M. Callens, C. Croux*

**15.00** Prediction of Renal Graft Failure Using Multivariate Longitudinal Profiles, *S. Fieuws*

### **15.30 Coffee Break**

**Session 4**, Chair: F. Tuerlinckx

**16.00** Penalized Splines as Mixed Models for Survey Estimation, *G. Claeskens*

**16.30** Piecewise Linear Mixed Models with Random Change-Points, *W. Van den Noortgate, P. Onghena*

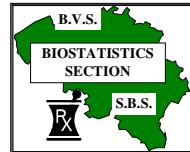
### **17.00 Reception**

More information can be found on the Website

[http://www.kuleuven.ac.be/ucs/seminars\\_events/other/lst1.htm](http://www.kuleuven.ac.be/ucs/seminars_events/other/lst1.htm)

Entrance is free, but the participants have to register.

## **BIOSTATISTICS SECTION OF SBS/BVS** **GENERAL ASSEMBLY**



Dear Colleagues,

It is our pleasure to invite you to the next meeting and General Assembly of the Biostatistics section of SBS/BVS.

The General Assembly will be preceded by an intensive presentation with room for discussion of the East software version 4, by Y. Jemiai PhD, who is a biostatistician working for Cytel in the US. As this software is extensively used by many of us, we hope it will be of interest to you.

Date: 14 June 2006, PM

Place: UCB, Chemin du Foriest, 1420 Braine l'Alleud

Agenda:

1.30: Arrival, registration

1.45-2.00: Brief introduction

2.00-3.30: Presentation of East version 4, Part I

Some of the topics:

- Innovative designs in the spirit of the FDA's Critical Path Initiative.
- Fixed sample size design, group sequential design
- Simulation and interim monitoring for group sequential trials
- Survival designs: multiple accrual periods, piecewise constant hazards, differential dropouts, simulation of non-proportional hazards
- Information based designs and adaptive designs

3.30-3.45: break

3.45-5.15: part II

5.15-5.45: room for informal discussion – break

5.45-end: General Assembly

1. Year Report from the president
2. Presentation of the financial report by the treasurer and approval by the Assembly
3. Election of the new members of the board
4. Plan for the next two years
5. Other business

We look forward to meeting you at GA.

Best regards,

Philippe Lambert

Bruno Boulanger

Cécile Dubois

Jan Bogaerts

UCL

Lilly

UCB

EORTC

## **B-ENBIS WORKSHOP**

### **Design and Analysis of Experiments:**

**June 2<sup>nd</sup> 2006**

The next workshop of the Belgian branch of the European Network on Business and Industrial Statistics organizes a workshop on the design and analysis of experiments at 2pm on June 2<sup>nd</sup>. The focus will be on cost-efficient screening experiments, including supersaturated designs and split-plot type of designs. Speakers include Bradley Jones (SAS JMP) and Eric Schoen (TNO).

Detailed information on the location and programme will be posted on  
<http://www.stat.ucl.ac.be/B-ENBIS/index.html>

## FORTHCOMING STATISTICAL EVENTS

**June 2, 2006** -- B-ENBIS Workshop: Design and Analysis of Experiments. Detailed information on the location and programme will be posted on <http://www.stat.ucl.ac.be/B-ENBIS/index.html>

**June 12, 2006** – K.U. Leuven – First Leuven Statistical Day. More information can be found on the Website  
[http://www.kuleuven.ac.be/ucs/seminars\\_events/other/lst1.htm](http://www.kuleuven.ac.be/ucs/seminars_events/other/lst1.htm)

**June 14, 2006** – UCB (Braine l'Alleud) – next meeting and General Assembly of the Biostatistics section of SBS/BVS

**August 27-31, 2006** – Geneva – ISCB 2006. Contact persons: David W. Warne ([david\\_w\\_warne@bluewin.ch](mailto:david_w_warne@bluewin.ch)), Chair, Local Organising Committee, or Lutz Edler ([edler@dkfz-heidelberg.de](mailto:edler@dkfz-heidelberg.de)), Chair, Scientific Programme Committee.  
Website: <http://www.iscb2006.info>

**September 3-8, 2006** – Liège – International Congress for Mathematical Geology.  
Website: <http://www.geomac.ulg.ac.be/iamg06/>

**October (11)-13, 2006** – Houffalize – 14<sup>th</sup> annual meeting of the Belgian Statistical Society (BSS). More information and instructions on how to register and submit abstracts can be found on  
<http://www.stat.ucl.ac.be/BSS2006>

## **MEMBER NEWS**

Uwe Einmahl (VUB) is since 1 March 2006 associate editor of the "Journal of Theoretical Probability".

He has also been appointed for a 3 year term (2006-2008) as member of the IMS (Institute of Mathematical Institute) committee on fellows. There are in total 9 members. The task of the committee is to evaluate all candidates who have been nominated for IMS fellowship and to decide who will become fellow.

**Speech presented by J. Beirlant at the occasion of the inaugural  
lecture of the Belgian Francqui Chair awarded  
to Professor Marc Hallin**

**Leuven October 20, 2005**

It is a great pleasure for me to welcome you as Dean of the Faculty of Science of KU Leuven and as a statistician, at this Inaugural Lecture of the Belgian Francqui Chair proposed by the KU Leuven and awarded to our friend and colleague Professor Marc Hallin from the Université Libre de Bruxelles.

In 1932, Emile Francqui and Herbert Hoover together decided to set up a foundation, which they entrusted with a large amount of money. The Francqui Foundation was founded by Royal Decree of February 1932 under the legal form of an “Institution of Public Utility”. The purpose of the Francqui Foundation is to encourage the prestige of fundamental research. It also provides Belgian scholars and scientists with indisputable moral support. The statutes clearly state that its objective is to “further the development of higher education and scientific research in Belgium.” This implicitly means that interuniversity collaboration is also encouraged.

In order to realize this aim, the work of the Francqui foundation revolves around four areas of activity: The Francqui prize, The Belgian Francqui Chairs, The Interuniversity Foreign Francqui Chairs, and collaboration with the Belgian American Educational Foundation.

Within the framework of the Belgian Francqui Chairs, each year each university may propose to the Francqui Foundation the organization of a course of lectures on a particular subject. The Foundation invites a Belgian or foreign professor to hold the Chair and organize an educational course of the HIGHEST LEVEL in his or her field. The added benefit of the Belgian Francqui Chairs is that they encourage exchanges between Belgian universities. The Inaugural Lecture for such a course is usually an opportunity to bring together all the prominent figures of the field in question and to emphasize this collaboration.

So far extracts from the website of the Foundation itself. In the remainder of my introduction I would like to demonstrate that the choice of Marc Hallin

has a high goodness of fit value (or a high correlation with) these basic principles from the Foundation. First a statistical proof: it is a pleasure for me to welcome here today colleagues from several other universities in Belgium, next to several statisticians from the Université Libre de Bruxelles and our own K.U Leuven.

The Belgian academic statistical community has largely expanded over the last two decades, both in the number of excellent researchers, in the quality of work and the international recognition of the work that is delivered here. The Belgian Statistical Society refounded in 1993 was designed as an excellent instrument for academic cooperation and exchange in our field. I became a friend and close colleague of Marc Hallin after I was able to assist him when restarting the Belgian Statistical Society. So I consider myself as a privileged observer of Marc's skills.

Among this community of Belgian statisticians Marc Hallin in my opinion receives an extreme high international recognition.

Marc's work and personality shows a combination of several characteristics

- **The high standard of his research.** The relevance, volume, impact and viability of his research is excellent. This is confirmed by citation counts, many invitations on all continents, editorship of eight journals, the large proportion of his papers that appeared in top journals like Annals of Statistics, Journal of the Royal Statistical Society, Bernoulli to mention some. For instance right now: he just comes back from giving a series of lectures in the US invited by the top schools in the northeast of the US. He is invited this year at the famous Lunteren conference in the Netherlands; in fact not many Belgians have been asked by our neighbors.
- **The broadness of his research.** He started off with some important papers in game theory, after which he made some nice contributions in actuarial science. The last twenty years he now mainly concentrates on time series analysis, rank-based statistics, and semiparametric models. Since the startup of the ECARES research center at ULB he returns more often to econometric applications such as the analysis of panels of time series data.
- **His leadership.** He pulled the Belgian statisticians together and created a sense of pride in the Belgian Statistical Community, after years of dedicated and hard work as the President of the Belgian Statistical Society, as the organizer of multiple Journées de Statistique for the French speaking statisticians from all over the

world, and as the early leader of the Journées de Statistique Franco-Belge.”.

- **His personality.** He has a kind, caring, unselfish personality. He cares for cooperation and especially interuniversity cooperation. He is always keen on the fact that nobody is forgotten in a research proposal submitted by different universities.

Further, Marc is not only an excellent mathematician, he also has a great knowledge of literature and is an excellent musician. “He is a grand monsieur of statistics in Belgium.” He is respected and loved by the colleagues who know him well and work with him.

The series of lectures he starts today is on Rank tests, asymptotic statistics and semiparametric models.

His work on rank tests has its origins in his longer-term interest in hypothesis testing problems in time-series analysis. This remarkable work since rank tests in the setting of dependent data are a particularly difficult introduction to nonparametric methods.

*In Asymptotic statistics and semiparametric models* the unknown statistical parameters are functions. He has about 40 papers in this area, culminating in his Bernoulli paper in 2003 and recent papers in the Annals of Statistics where he presents general results that have many implications for methods that deal with general semiparametric models.

I hope to have demonstrated that Marc is an outstanding figure in statistics and probability and hence deserves this exceptional award. Please Marc the word is to you.

Professor Jan Beirlant  
Dean of the Faculty of Sciences  
Katholieke Universiteit Leuven

## **2006 ENBIS AWARDS**

At its annual conference in Wroclaw in September (see <http://www.enbis.org>), the **European Network for Business and Industrial Statistics** (ENBIS) will present the George Box Medal, the Best Manager Award and the Young Statistician Award.

Recipients of this year's George Box Medal for outstanding contributions to industrial statistics is **Gerry Hahn**. Gerry Hahn has been responsible for the success of Six Sigma within *General Electric* and, through his articles and books, worldwide. By his contributions to Statistics and Industrial Statistics, Gerry Hahn forms a bridge between academia, industry and business which is exactly what ENBIS aims to do.

Recipient of this year's Best Manager Award, which recognises managers who made a significant contribution to the success of their companies by advancing the spread and the practice of statistics, is **Gerhard Rappitsch**, who has been engaged at the semiconductor company *austriamicrosystems AG* since 1997. He has been working in the areas of analog circuit simulation, statistical device modeling and Design for Manufacturability (DFM).

Finally, **Peter Goos** will receive the 2006 Young Statistician Award for introducing innovative Statistical methods and promoting the use of Statistics in daily practice. Peter Goos is a Professor at the Faculty of Applied Economics of the *Universiteit Antwerpen*. Most of his work is on the design and analysis of industrial experiments and discrete choice experiments.

Fabrizio Ruggeri  
ENBIS President

## **StatUA: NEWLY FOUNDED FORUM FOR (APPLIED) STATISTICS AT THE UNIVERSITY OF ANTWERP**

On March 9, Rector Francis Van Loon opened the official starting day of *StatUA*, the recently founded forum for (applied) statistics at the University of Antwerp. The aim of the initiators was to make *StatUA* known inside as well as outside the Antwerp university. The diversity of the backgrounds of the 50 attendees – nearly every faculty of the University of Antwerp was represented – shows that statistics is considered an important auxiliary science for researchers in different fields of study.

Not coincidentally, the interdisciplinary nature of statistics was the central theme of the starting day. That statistics benefits from contacts with other disciplines was also emphasized by the first speaker, Geert Molenberghs (Universiteit Hasselt). He drew, for example, the attention to the fact that famous statisticians, such as Wilcoxon and Tukey, actively participated in applied biometrical workshops on entomology to make the point that interdisciplinarity is a key factor for successful research in statistics. Johan Suykens (Katholieke Universiteit Leuven) and Christian Ritter (Monnet Centre International Laboratory, Université Catholique de Louvain) delivered two other captivating presentations. The former provided a lecture on *support vector machines*, whereas the latter entertained the public with a talk on *statistical error*.

In the short run, *StatUA* aims at becoming a contact for all whom are involved in statistics and applied statistics within the University of Antwerp. For that purpose, a series of monthly seminars has been launched, to provide an opportunity for making cross-faculty contacts. The first speakers in the series were Christophe Croux (Katholieke Universiteit Leuven) and Jack Kleijnen (Universiteit van Tilburg). The seminars, which are also open to colleagues from outside the university, take place on Thursdays between 12.30 and 13.30. Before and after the talks, sandwiches and coffee are provided. The next few presenters in the *StatUA* series will be Andreas Christmann (Vrije Universiteit Brussel), Geert Verbeke (Katholieke Universiteit Leuven) and Jeroen Vermunt (Universiteit van Tilburg). More information on the seminars (abstracts, venues, registration) can be found at

<http://www.ua.ac.be/statua/>

*StatUA* does not only hope to offer inspiration for ongoing and novel research in statistics, but it also aims at providing high-quality statistical support to research projects and publications in any scientific domain where

people from the Antwerp university are active. As *StatUA* is a joint initiative from people with entirely different backgrounds (Joost Weyler (Faculty of Medicine), Ann De Schepper, Peter Goos (both from the Faculty of Applied Economics) and Lucien Lemmens, Anja Struyf, Stefan Van Dongen and Floris Wuyts (Faculty of Sciences)), we are convinced that *StatUA* has the potential to become a driving force in the generation of research output of the entire university, so that statistics can claim the central position in Antwerp it deserves.

Another goal of *StatUA* is to act as a contact for companies and research institutions with questions concerning statistics and data analysis. *StatUA* will also try to put the University of Antwerp on the Belgian statistical map through the active participation to meetings of the Belgian Statistical Society, its bio-statistical section, the Belgian branch of the European Network on Business and Industrial Statistics and the Belgian Chemometrics Society. Evidently, it will also attempt to play a role on the international statistical scene.

When these goals are met, *StatUA* can evolve from an informal forum to a center with a more formal character.

Peter Goos  
<http://www.ua.ac.be/statua/>

## **RECENT PhD THESES**

### **Universiteit of Hasselt**

Ivy Jansen. *Flexible Model Strategies and Sensitivity Analysis Tools for Non-Monotone Incomplete Categorical Data* (June 24, 2005) – Promotors: Prof. dr. G. MOLENBERGHS and Prof. dr. M. AERTS)

In applied sciences, data are more and more measured repeatedly over time, resulting in so-called longitudinal data. However, they typically suffer from incompleteness. Since incompleteness usually occurs for reasons outside of the control of the investigators and may be related to the outcome measurement of interest, it is generally necessary to address the process governing incompleteness. Only in special but important cases it is possible to ignore the missingness process.

In this thesis, an alternative was given for the frequently used but highly restrictive complete case analysis and last observation carried forward analysis. While the latter assume the data to be missing completely at random, the assumption of missing at random is sufficient for the linear mixed models, when the data are continuous, and for the generalized linear mixed models in the random-effects approach, or the weighted generalized estimating equations in the marginal model context, when the data are of the binary type. Analyses were performed on data in different scientific fields (depression, sociology).

While in current statistical practice, still a lot of effort is needed before people come to recognize the necessity of those missing at random modeling approaches as the main mode of analysis, research is, already for many years, directed towards the development of missing not at random models for all types of data and missingness mechanisms, since not at random missingness cannot be fully ruled out based on the observed data.

The main objective of this thesis was to develop non-random models to handle non-monotone missing data within the non-Gaussian setting, since also categorical outcomes are very prominent in statistical practice, and techniques for this type of data are less standard, because of the lack of a simple analogue to the normal distribution.

First, a family of joint models for outcomes and non-response, based on an extension and reparameterization of Baker, Rosenberger and DerSimonian (1992), has been proposed, to avoid the risk of invalid solutions, and in which (possibly continuous) covariates are allowed, in the measurement model as well as in the missingness model. Focus was on bivariate binary outcomes. Second, a set of models for multivariate ordinal data, based on the multivariate Dale model (Molenberghs and Lesaffre, 1994) was developed. A (bivariate or multivariate) Dale model for the outcomes was combined with a bivariate Dale model for the non-response. In the hierarchy of those Dale-Dale models, the inclusion of constant or varying covariate effects was also possible in both the measurement and missingness model.

All previous models were based on the selection model factorization of the joint model for the outcomes and non-response process. Also within the pattern-mixture models, a distinction can be made between continuous or discrete data, and monotone or non-monotone missingness. In this thesis, we developed a pattern-mixture model framework for non-monotone discrete outcomes, using the multivariate Dale model to analyze the data per pattern. Identifying restrictions were used to specify the conditional distribution of the unobserved measurements, given the observed ones in a specific pattern. Specific assumptions were defined to deal with intermittent missingness. Attention was also devoted to the determination of marginal effects across patterns.

Since MNAR models are sensitive to the underlying model assumptions, generally performing a sensitivity analysis is strongly advisable. Contrasting several models within one of the families proposed here (extended BRD, Dale-Dale or pattern-mixture), is in itself a way to perform a sensitivity analysis. Also comparing the results from selection models and pattern-mixture models can be fruitful to assess the sensitivity of such models. On the other hand, a sensitivity analysis can also be conducted at the level of the individuals. Therefore, in this thesis, the already existing methods of global and local influence (Cook and Weisberg, 1982; Cook, 1986) have been adjusted to assess the influence in the case of selection models for bivariate binary outcomes subject to non-monotone missingness. Clearly, it is advisable to combine several of those methods within an integrated sensitivity analysis.

Until now, local influence was mainly used to detect observations that had a high impact on the conclusions due to their aberrant missingness mechanism. However, in many applications, the situation turned out to be more complex than anticipated. Indeed, the influential subjects often are influential for other than missingness related features. The questions that

arose from those findings were (1) When can a subject or a group of subjects be considered as influential?, and (2) What reasons might be related to high influence values? An attempt was made to answer those questions.

References:

- Baker, S.G., Rosenberger, W.F. and DerSimonian, R. (1992) Closed-form estimates for missing counts in two-way contingency tables, *Statistics in Medicine*, 11, 643-657
- Cook, R.D. (1986) Assessment of local influence. *Journal of the Royal Statistical Society, Serie B*, 48, 133-169
- Cook, R.D. and Weisberg, S. (1982) *Residuals and Influence in Regression*. London: Chapman and Hall.
- Molenberghs, G. and Lesaffre, E. (1994) Marginal modelling of correlated ordinal data using a multivariate Plackett distribution. *Journal of the American Statistical Association*, 89, 633-644

## **RECENT PUBLICATIONS**

### **StatUA, Interfacultair Forum voor (Toegepaste) Statistiek aan de Universiteit Antwerpen**

Borghers Eddy, Wessa Patrick.- The Xycoon project.- Antwerp: UA, 2005.- 41 p..- (Research paper / UA, Faculty of Applied Economics; 2005:23)

Annaert Jan, Brys Guy, de Ceuster Marc.- A new large sample test of univariate symmetry: a comparative size-power study.- In: Advances and applications in statistics, 5:3(2005), p. 353-370

Brys Guy, Hubert M., Rousseeuw P.J..- A robustification of independent component analysis.- In: Journal of chemometrics, 19(2005), p. 1-12

Zaidman A., Calders T., Demeyer S., Paredaens J..- Applying webmining techniques to execution traces to support the program comprehension process.- In: 9th European Conference on Software Maintenance and Reengineering (CSMR), s.l., , 2005, p. 134-142

Mens Tom, Wermelinger Michel, Ducasse Stéphane, Demeyer Serge, Hirschfeld Robert.- Challenges in software evolution.- In: Proceedings IWPSE'05 (8th International Workshop on Principles of Software Evolution), s.l., IEEE Press, 2005, p. 123-131

du Bois B., Demeyer S., Verelst Jan.- Does refactor to understand improve program comprehension?.- In: Proceedings of the 9th European Conference on Software Maintenance and Reengineering (CSMR), Manchester(UK), 21-23 maart 2005, Manchester, , 2005, p. 334-343

Mens Tom, van Eetvelde Niels, Demeyer Serge, Janssens Dirk.- Formalizing refactorings with graph transformations.- In: International journal on software maintenance: research and practice, 15:4(2005), p. 247-276

Demeyer Serge, van Rysselberghe Filip, Gîrba Tudor, Ratzinger Jacek, Marinescu Radu, Mens Tom, du Bois Bart, Janssens Dirk, Ducasse Stéphane, Lanza Michele, Rieger Matthias, Gall Harald, el- Ramly Mohammad.- The LAN-simulation: a refactoring teaching example.- In: Proceedings IWPSE'05 (8th International Workshop on Principles of Software Evolution), s.l., IEEE Press, 2005, p. 123-131

Ducasse Stéphane, Gîrba Tudor, Lanza Michele, Demeyer Serge.- Moose: a collaborative and extensible reengineering environment.- In: Tools for software maintenance and reengineering / di Penta Massimiliano [edit.], e.a., s.l., , 2005, p. 55-71

Temmerman Marijn, Daylight Edgar, Demeyer Serge, Catthoor Franky, Dhaene Tom.- Moving up to the modeling level for the transformation in embedded multimedia applications.- In: Proceedings SAMOS'05 (Fifth Meeting on the Embedded Computer Systems: Architectures, Modeling, and Simulation), Berlin, Springer, 2005

Nierstrasz Oscar, Ducasse Stéphane, Demeyer Serge.- Object-oriented reengineering patterns: an overview.- In: Proceedings of Generative Programming and Component Engineering (GPCE 2005) / Glück Robert [edit.], e.a., Berlin, Springer, 2005, p. 1-9  
Nierstrasz Oscar, Ducasse Stéphane, Demeyer Serge.- Objektorientierte Re-Engineering-Muster: ein Überblick.- In: ObjektSpektrum, :6(2005), p. 46-51

Demeyer Serge.- Refactor conditionals into polymorphism: what is the performance cost of introducing virtual calls?- In: Proceedings ICSM'05 (International Conference on Software Maintenance), s.l., IEEE Press, 2005, p. 627-630

Dewolfs D., Kurzyniec D., Sunderam V., Broeckhove J., Dhaene T., Fagg G..- Applicability of generic naming services and fault-tolerant metacomputing with FT-MPI.- In: Recent advances in parallel virtual machine and message passing interface, Berlin, Springer, 2005, p. 268-275

Temmerman Marijn, Daylight Edgar, Demeyer Serge, Catthoor Franky, Dhaene Tom.- Moving up to the modeling level for the transformation in embedded multimedia applications.- In: Proceedings SAMOS'05 (Fifth Meeting on the Embedded Computer Systems: Architectures, Modeling, and Simulation), Berlin, Springer, 2005

Vanmaele Michèle, de Schepper Ann, Dhaene Jan, Reynaerts Huguette, Schoutens Wim, van Goethem Paul.- 3rd Actuarial and Financial Mathematics Day, 4 February 2005.- Brussel: Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten, 2005.- 112 p.

Koch Inge, de Schepper Ann.- Discrete annuities using truncate stochastic interest rates: the case of a Vasicek and Ho-Lee model.- Antwerpen: UA, 2005.- 19 p... (Research paper / UA, Faculteit TEW; 2005:6)

Goovaerts Marc, de Schepper Ann, Hua Y., Darkiewicz G., Vyncke D..- On the use of copulas for calculating the present value of a general cash flow.- In: Tijdschrift voor economie en management, L:1(2005), p. 69-93

Decamps M., Goovaerts M., de Schepper Ann.- Pricing exotic options under local volatility.- In: Tijdschrift voor economie en management, L:1(2005), p. 49-67

Atayan M.R., de Wolf E.A., [et al].- Charge fluctuations in pi+p and K+p collisions at 250 GeV/c.- In: Physical review: D: particles and fields, 71(2005), p. 012002,1-5

Aktas A., de Roeck A., de Wolf E.A., van Mechelen P., [et al.].- A direct search for stable magnetic monopoles produced in positron-proton collisions at HERA.- In: European physical journal: C: particles and fields, 41:2(2005), p. 133-141

Atayan M.R., de Wolf E.A., [et al.].- Entropy analysis in  $p+p$  and  $K+p$  collisions at  $\sqrt{s}=22\text{GeV}$ .- In: Acta physica Polonica: B: elementary particle physics, nuclear physics, theory of relativity, 36:10(2005), p. 2969-2978

Abbiendi G., de Roeck A., de Wolf E.A., [et al.].- Flavour-independent  $h_0 A_0$  search and two Higgs doublet model interpretation of neutral Higgs boson searches at LEP.- In: European physical journal: C: particles and fields, 40:3(2005), p. 317-332

Aktas A., de Roeck A., de Wolf E.A., van Mechelen P., [et al.].- Inclusive production of  $D^+$ ,  $D^0$ ,  $D^+s$  and  $D^{*+}$  mesons in deep inelastic scattering at HERA.- In: European physical journal: C: particles and fields, 38(2005), p. 447-459

Aktas A., de Roeck A., de Wolf E.A., van Mechelen P., [et al.].- Measurement of beauty production at HERA using events with muons and jets.- In: European physical journal: C: particles and fields, 41:4(2005), p. 453-467

Aktas A., de Roeck A., de Wolf E.A., van Mechelen P., [et al.].- Measurement of charm and beauty photoproduction at HERA using  $D^*\mu$  correlations.- In: Physics letters: B, 621:1/2(2005), p. 56-71

Aktas A., de Roeck A., de Wolf E.A., van Mechelen P., [et al.].- Measurement of deeply virtual Compton scattering at HERA.- In: European physical journal: C: particles and fields, 44:1(2005), p. 1-11

Aktas A., de Roeck A., de Wolf E.A., van Mechelen P., [et al.].- Measurement of dijet cross sections in  $e p$  interactions with a leading neutron at HERA.- In: European physical journal: C: particles and fields, 41:3(2005), p. 273-286

Abbiendi G., de Roeck A., de Wolf E.A., [et al.].- Measurement of event shape distributions and moments in  $e^+e^-$ -hadrons at 91-209 GeV and a determination of  $\alpha_s$ .- In: European physical journal: C: particles and fields, 40:3(2005), p. 287-316

Aktas A., de Roeck A., de Wolf E.A., van Mechelen P., [et al.].- Measurement of  $F_{cc2}$  and  $F_{bb2}$  at high  $Q^2$  using the H1 vertex detector at HERA.- In: European physical journal: C: particles and fields, 40:3(2005), p. 349-359

Aktas A., de Wolf E.A., van Mechelen P., [et al.].- Measurement of prompt photon cross sections in photoproduction at HERA.- In: European physical journal: C: particles and fields, 38(2005), p. 437-445

Abbiendi G., de Roeck A., de Wolf E.A., [et al.].- Measurements of  $R_b$  in  $e^+e^-$  collisions at  $\sqrt{s}$  between 182 and 209 GeV.- In: Physics letters: B, 609(2005), p. 212-225

Aktas A., de Roeck A., de Wolf E.A., van Mechelen P., [et al.].- Search for leptoquark bosons in ep collisions at HERA.- In: Physics letters: B, 629:1(2005), p. 9-19

Aktas A., de Roeck A., de Wolf E.A., van Mechelen P., [et al.].- Search for light gravitinos in events with photons and missing transverse momentum at HERA.- In: Physics letters: B, 616:1/2(2005), p. 31-42

Abbiendi G., de Roeck A., de Wolf E.A., [et al.].- Search for radions at LEP2.- In: Physics letters: B, 609(2005), p. 20-34

Kittel W., de Wolf E.A..- Soft multihadron dynamics.- Singapore: World Scientific, 2005.- 668 p..- ISBN 981-256-295-8

Kessels R., Goos Peter, Vandebroek M...- Estimating people's values.- In: Scientific computing world, 84, p. 40-41

Langhans I., Goos Peter, Vandebroek M..- Identifying effects under a split-plot design structure.- In: Journal of chemometrics, 19(2005), p. 5-15

Goos Peter, Kobilinsky A., O'Brien T.E., Vandebroek M..- Model-robust and model-sensitive designs.- In: Computational statistics and data analysis, 49:1(2005), p. 201-216

Goos Peter, Tack Lieven, Vandebroek M..- The optimal design of blocked experiments in industry.- In: Applied optimal designs / Berger M.P.F. [edit.], e.a., New York, Wiley, 2005, p. 247-279

Goos Peter.- The usefulness of optimal design for generating blocked and split-plot response surface experiments.- Antwerpen: UA, 2005.- 19 p..- (Research paper / UA, Faculty of Applied Economics; 2005:33)

Koch Inge, de Schepper Ann.- Discrete annuities using truncate stochastic interest rates: the case of a Vasicek and Ho-Lee model.- Antwerpen: UA, 2005.- 19 p..- (Research paper / UA, Faculteit TEW; 2005:6)

Mortelmans D., Spooren P...- Evaluatie van opleidingsonderdelen: voorstel tot implementatie van 2 extra Likertschalen in het UA-evaluatie-instrument.- Antwerpen: Universiteit Antwerpen, 2005.- 46 p.

Mortelmans D..- Gezin en werk: een balans.- In: SPES-cahier, 4(2005), p. 41-47

Mortelmans Dimitri, Vanderweyden Katrijn, Geldof Dirk..- Hoe lang werken we, een loopbaan lang?.- In: Over-werk, 15:2/3(2005), p. 67-72

Mortelmans D..- De jonge cyborg? Snelcursus communiceren met jongeren.- In: Krax, 4:4(2005), p. 19-26

Mortelmans D., Spooren P..- Kwaliteit meten en beoordelen: eindrapport van de valideringsstudie naar het UA-evaluatie-instrument voor opleidingsonderdelen.- Antwerpen: Universiteit Antwerpen, 2005.- 172 p.

Mortelmans Dimitri, Damen Sofie, Sinardet Dave.- Lief, liever, ... liefdadig? Over het liefdadigheidsgehalte van de Vlaming.- Antwerpen: Universiteit Antwerpen, 2005.- 32 p..- (PSW-papers / Universiteit Antwerpen, Faculteit Politieke en Sociale Wetenschappen; 2005/8)

Sinardet Dave, Mortelmans Dimitri.- Preserving the front stage: causes, consequences and the symbolic meaning of failed gift exchanges.- In: International review of modern sociology: journal of cross-national, cross-cultural and interdisciplinary research, 31:2(2005), p. 251-275

Heylen L., Mortelmans D., Kuppens A..- De realiteit van de nieuwe loopbaan longitudinaal bekeken.- In: Over.werk, 15:1(2005), p. 69-74

Mortelmans Dimitri, Sinardet Dave.- Reflecting culture and society? Norms and rules governing gift-giving practices.- In: The Netherlands journal of social sciences, 40:2(2005), p. 176-201

Dehertogh B., Mortelmans D., Ottoy W..- Scouting: meer dan jeugd bewegen alleen? Eeen product-effectonderzoek in opdracht van VVKSM.- Antwerpen: Universiteit Antwerpen, 2005.- 205 p.

Mortelmans Dimitri.- Sign values in processes of distinction: the concept of luxury.- In: Semiotica, 157(2005), p. 497-520

Meulemans H., van Ouytsel J., Mortelmans D., Rigouts L., Heunis J.C., Matebesi S.Z., van Rensburg H.C.J..- Social capital and community TB care in the Free State, South Africa.- In: Acta academica, S1(2005), p. 128-153

Mortelmans D..- Visualizing emptiness.- In: Visual anthropology, 18:1(2005), p. 19-46

de Cauwer B., Reheul D., Nijs I., Milbau A..- Biodiversity and agro-ecology in field margins.- In: Communications on applied biological sciences, 70:1(2005), p. 17-49

Milbau Ann, Scheerlinck Liesbeth, Reheul Dirk, de Cauwer Benny, Nijs Ivan.- Ecophysiological and morphological parameters related to survival in grass species exposed to an extreme climatic event.- In: Physiologia plantarum, 125:4(2005), p. 500-512

de Cauwer Benny, Reheul Dirk, d' Hooghe Katrien, Nijs Ivan, Milbau Ann.- Evolution of the vegetation of mown field margins over their first 3 years.- In: Agriculture, ecosystems and environment, 109:1/2(2005), p. 87-96

Liu Z.-G., Li Z.-Q., Nijs I., Bogaert J..- Fine-scale pattern of Cleistogenes squarrosa population under different grazing intensities.- In: Acta prataculturae sinica, 14:1(2005), p. 11-17

Li Zhen Qing, Bogaert Jan, Nijs Ivan.- Gap pattern and colonization opportunities in plant communities: effects of species richness, mortality, and spatial aggregation.- In: Ecography, 28:6(2005), p. 777-790

Gielen Birgit, de Boeck Hans J., Lemmens Catherine M.H.M., Valcke Roland, Nijs Ivan, Ceulemans Reinhart.- Grassland species will not necessarily benefit from future elevated air temperatures: a chlorophyll fluorescence approach to study autumn physiology.- In: Physiologia plantarum, 125:1(2005), p. 52-63

Mattheeuwsen Roel, Ledeganck Pieter, Vincke Sofie, van de Vijver Bart, Nijs Ivan, Beyens Louis.- Habitat selection of aquatic testate amoebae communities on Qeqertarsuaq (Disko Island), West Greenland.- In: Acta protozoologica, 44:3(2005), p. 253-263

Milbau A., Nijs I., de Raedemaeker F., Reheul D., de Cauwer B..- Invasion in grassland gaps: the role of neighbourhood richness, light availability and species complementarity during two successive years.- In: Functional ecology, 19:1(2005), p. 27-37

Marchand F.L., Mertens S., Kockelbergh F., Beyens L., Nijs I..- Performance of High Arctic tundra plants improved during but deteriorated after exposure to a simulated extreme temperature event.- In: Global change biology, 11(2005), p. 2078-2089

Rossi E., Nijs I..- Voorspellingskader voor invasieve planten.- In: Natuur.focus, 4:3(2005), p. 103-105

Lukach Ruslan, Plasmans Joseph, Kort Peter M..- Innovation strategies in a competitive dynamic setting.- Munich: CESifo, 2005.- 26 p..- (CESifo working paper; 1395)

Plasmans Jef, Lukach Ruslan.- International knowledge flows from and into a small open economy: patent citation analysis.- In: Beyond borders: internationalisation of R&D and policy implications for small open economies / Spithoven A. [edit.], e.a., Amsterdam, Elsevier, 2005, p. 331-357

Plasmans Jef, van Aarle Bas, di Bartolomeo Giovanni, Engwerda Jacob C., Michalak Tomasz.- Macroeconomic stabilization policies in the EMU: spillovers, asymmetries, and institutions.- Munich: , 2005.- .- (CESifo working paper; 1376)

Plasmans Jef, do Couto Ferraz L. Pedreira, van Poeck André.- On the relative stickiness of wages and prices in Western Europe and the United States: a structural VAR approach.- Antwerp: UA, 2005.- 20 p..- (Research paper; 2005:20)

Plasmans Joseph, do Couto Ferraz L. Pedreira, van Poeck André.- On the relative stickiness of wages and prices in Western Europe and the United States: a structural VAR approach.- Antwerp: UA, 2005.- .- (Research paper / UA, Faculty of Applied Economics; 2005:20)

Lukach Ruslan, Kort Peter M., Plasmans Joseph.- Optimal R&D investment strategies with quantity competition under the threat of superior entry.- Munich: CESifo, 2005.- 34 p..- (CESifo working paper; 1385)

Hidders Jan, Michiels Philippe, Paredaens Jan, Vercammen Roel.- LiXquery: a foundation for Xquery research.- In: SIGMOD record, 34:4(2005), p. 21-26

Hidders Jan, Marrara Stefania, Paredaens Jan, Vercammen Roel.- On the expressive power of Xquery fragments.- In: Proceedings of the Tenth International Symposium on Database Programming Languages (DBPL 2005), Trondheim, Norway, Berlin, Springer, 2005, p. 154-168

le Page Wim, Hidders Jan, Paredaens Jan, Vercammen Roel, Michiels Philippe.- On the expressive power of node construction in Xquery.- In: Proceedings of the 8th International Workshop on the Web and Databases (WebDB 2005), Baltimore, Maryland, USA, s.l., , 2005, p. 85-90

Serneels Sven, van Espen Pierre J..- Bootstrap confidence intervals for trilinear partial least squares regression.- In: Analytica chimica acta, 544(2005), p. 153-158

Serneels Sven, Geladi Paul, Moens Maarten, Blockhuys Frank, van Espen Pierre J..- Influence properties of trilinear partial least squares regression.- In: Journal of chemometrics, 19:8(2005), p. 405-411

Serneels Sven, Filzmoser Peter, Croux Christophe, van Espen Pierre J..- Robust continuum regression.- In: Chemometrics and intelligent laboratory systems, 76:2(2005), p. 197-204

Springael Johan, de Keyser Wim.- A branch and bound algorithm to construct a consensus ranking based on Kendall's t.- Antwerp: UA, 2005.- 11 p..- (Research paper / UA, Faculty of Applied Economics; 2005:30)

Thijssen Peter, de Langhe Sarah L..- Explaining the varying electoral appeal of the Vlaams Blok in the districts of Antwerp.- In: Ethical perspectives, 12:2(2005), p. 231-258

Preatoni Damiano, Mustoni Andrea, Martinoli Adriano, Carlini Eugenio, Chiarenzi Barbara, Chiozzini Simonetta, van Dongen Stefan, Wauters Luc A., Tosi Guido.- Conservation of brown bear in the Alps: space use and settlement behavior of reintroduced bears.- In: Acta oecologica, 28:3(2005), p. 189-197

Wauters Luc A., Bertolino Sandro, Adamo Marco, van Dongen Stefan, Tosi Guido.- Food shortage disrupts social organization: the case of red squirrels in conifer forests.- In: Evolutionary ecology, 19(2005), p. 375-404

van Dongen Stefan, Talloen Willem, Lens Luc.- High variation in developmental instability under non-normal developmental error: a Bayesian perspective.- In: Journal of theoretical biology, 236(2005), p. 263-275

Croonenberghs J., Fegert J.M., Findling R.L., de Smedt G., van Dongen S..- Risperidone in children with disruptive behavior disorders and subaverage intelligence: a 1-year, open-label study of 504 patients.- In: Journal of the American Academy of Child and Adolescent Psychiatry, 44:1(2005), p. 64-72

Padilla R., Schalm O., Janssens K., Arrazaeta R., van Espen P..- Microanalytical characterization of surface decoration in Majolica pottery.- In: Analytica chimica acta, 535:1-2(2005), p. 201-211

van Grieken R., Janssens K., van Espen P., Injuk J., Padilla R., Vittiglio G., Potgieter J.H..- Novel quantitative procedures for in-situ X-ray fluorescence analysis.- In: In situ applications of X ray fluorescence techniques: final report of a coordinated research project, 2000-2003, Vienna, IAEA, 2005, p. 45-60

Padilla R., van Espen P., Abrahantes A., Janssens K..- Semiempirical approach for standardless calibration in  $\mu$ -XRF spectrometry using capillary lenses.- In: X-ray spectrometry, 34:1(2005), p. 19-27

Liu Xiande, Zhu Jia, van Espen P., Adams F., Xiao Rui, Dong Shu-ping, Li Yuwu.- Single particle characterization of spring and summer aerosols in Beijing: formation of composite sulfate of calcium and potassium.- In: Atmospheric environment, 39:36(2005), p. 6909-6918

van Nuffelen Cyriel, van Rompay Kristel.- On the length of longest chordless cycles.- In: 4OR: a quarterly journal of operations research, 3:2(2005), p. 133-138

Verboven S., Hubert M..- A MATLAB toolbox for robust calibration.- In: Chemometrics and intelligent laboratory systems, 75(2005), p. 127-136

Romijn Sander, Hendriks Jeroen M.H., van Putte Bart P., Weyler Joost, Guetens Gunther, de Boeck Gert, de Brujin Ernst A., van Schil Paul E.Y..- Anterograde versus retrograde isolated lung perfusion with melphalan in the WAG-Rij rat.- In: European journal of cardiothoracic surgery, 27:6(2005), p. 1083-1085

Weyler J..- Besprekking proefschrift Etienne Vermeire: The study of research evidence synthesis, applied to adherence to treatment recommendations in people living with type 2 diabetes.- In: Huisarts nu, 34:8(2005), p. 439-442

Baay M., Weyler J., Vermorken J.B..- De betekenis van HPV-tests in de cervixscreening.- In: Tijdschrift voor geneeskunde, 61:20(2005), p. 1486-1487.- Brief aan de redactie

Malhotra-Kumar Surbhi, Lammens Christine, Chapelle Sabine, Mallentjer Cecile, Weyler Joost, Goossens Herman.- Clonal spread of fluoroquinolone non-susceptible Streptococcus pyogenes.- In: The journal of antimicrobial chemotherapy, 55:3(2005), p. 320-325

Baay Marc F.D., Tjalma Wiebren A.A., Lambrechts Hilde A.J., Pattyn Greet G.O., Lardon Filip, Weyler Joost, van Royen Paul, van Marck Eric A.E., Vermorken Jan

B..- Combined Pap and HPV testing in primary screening for cervical abnormalities: should HPV detection be delayed until age 35?.. In: European journal of cancer, 41:17(2005), p. 2704-2708

van Goethem M., Schelfout K., Kersschot E., Colpaert C., Weyler J., Verslegers I., Biltjes I., de Schepper A., Parizel P.M..- Comparison of MRI features of different grades of DCIS and invasive carcinoma of the breast.- In: Journal belge de radiologie = Belgisch tijdschrift voor radiologie, 88:5(2005), p. 225-232

Vermorken J.B., Schrijvers D.L.A.L., Weyler J.J.J., Carp L., Parizel P.M..- Diagnostiek in de oncologie.- In: Oncologie / van de Velde C.J.H., e.a., 7<sup>o</sup> dr., Houten, Bohn Stafleu Van Loghum, 2005, p. 83-124

Hagendorens M.M., Bridts C.H., Lauwers K., van Nuijs S., Ebo D.G., Vellinga A., de Clerck L.S., van Bever H.P., Weyler J.J., Stevens W.J..- Perinatal risk factors for sensitization, atopic dermatitis and wheezing during the first year of life (PIPO study).- In: Clinical and experimental allergy, 35:6(2005), p. 733-740

Sardari Nia Peyman, Weyler Joost, Colpaert Cecile, Vermeulen Peter, van Marck Eric, van Schil Paul.- Prognostic value of smoking status in operated non-small cell lung cancer.- In: Lung cancer, 47:3(2005), p. 351-359

Romijn Sander, Hendriks Jeroen M.H., van Putte Bart P., Weyler Joost, Guetens Gunther, de Boeck Gert, van Schil Paul E.Y..- Regional differences of melphalan lung levels after isolated lung perfusion in the rat.- In: Journal of surgical research, 125:2(2005), p. 157-160

Benoy Ina H., Salgado Roberto, Elst Hilde, van Dam Peter, Weyler Joost, van Marck Eric, Scharpé Simon, Vermeulen Peter B., Dirix Luc Y..- Relative microvessel area of the primary tumour, and not lymph node status, predicts the presence of bone marrow micrometastases detected by reverse transcriptase polymerase chain reaction in patients with clinically non-metastatic breast cancer.- In: Breast cancer research, 7:2(2005), p. 210-219

Desager Kristine N., Nelen Vera, Weyler Joost J., de Backer Wilfried A..- Sleep disturbance and daytime symptoms in wheezing school-aged children.- In: Journal of sleep research, 14:1(2005), p. 77-82

Schokkaert Erik, van de Voorde C., Willemé Peter, [et al].- De groei van de uitgaven in de gezondheidszorg: een overzicht van de literatuur.- In: Documentatieblad / Federale Overheidsdienst Financiën, 65:4(2005), p. 185-238

Vernimmen Bert, Dullaert Wout, Willemé Peter, Witlox Frank..- Optimizing inbound shipping strategies in hinterland transportation: a case of non-normally distributed demand during lead time.- In: Papers presented at the 2005 NECTAR Conference, June 2-4, 2005, Las Palmas de Gran Canaria, Spain, Las Palmas, , 2005

Dumont Michel, Rayp Glenn, Thas Olivier, Willemé Peter.- Practitioners' corner: correcting standard errors in two-stage estimation procedures with generated regressands.- In: Oxford bulletin of economics and statistics, 67:3(2005), p. 421-433

Chusseau Nathalie, Dumont Michel, Hellier Joël, Rayp Glenn, Willemé Peter.- Wage inequality and immigration in Europe during the first stage of the International Division of Labour (1960-1975).- Antwerp: UA, 2005.- 29 p..- (Research paper / UA, Faculty of Applied Economics; 2005:25)

Timmermans Bernadette, de Bodt Marc S., Wuyts Floris L., van de Heyning Paul H..- Analysis and evaluation of a voice-training program in future professional voice users.- In: Journal of voice, 19:2(2005), p. 202-210

Conraads V.M., Bosmans J.M., Schuerwagh A.J., de Clerck L.S., Bridts C.H., Wuyts F., Stevens W.J., Vrints C.J..- Effect of short-term treatment with pravastatin on cytokines and cytokine receptors in patients with chronic heart failure due to ischemic and nonischemic disease.- In: Journal of heart and lung transplantation, 24:8(2005), p. 1114-1117

Boudewyns A.N., Wuyts F.L., Hoppenbrouwers M., Ketelslagers K., Vanspauwen R., Forton G., van de Heyning P.H..- Meniett therapy: rescue treatment in severe drug-resistant M?ni?re's disease?.- In: Acta oto-laryngologica, 125:12(2005), p. 1283-1289

Guns C., de Bodt M., Wuyts F., van de Heyning P..- Mondmotoriek in de logopedische revalidatie voor dysartrie en dysfagie: zin of onzin? Resultaten van een literatuurstudie.- In: Logopedie, 18:6(2005), p. 12-24

Heylen L., Wuyts F.L., Mertens F., de Bodt M., van de Heyning P.H..- Normfonetogrammen voor "nonvocal nonprofessionals".- In: Logopedie, 18:2(2005), p. 27-30

Mistiaen Wilhelm P., van Cauwelaert Philip, Muylaert Philip, Wuyts Floris, Bortier Hilde.- Risk factors for congestive heart failure after aortic valve replacement with a Carpentier-Edwards pericardial prosthesis in the elderly.- In: Journal of heart valve disease, 14:6(2005), p. 774-779

van de Heyning Paul H., Wuyts Floris, Boudewyns An.- Surgical treatment of Meniere's disease.- In: Current opinion in neurology, 18:1(2005), p. 23-28

Furman J., Wuyts F.L..- Vestibular laboratory testing.- In: Electrodiagnosis in clinical neurology / Aminoff M. [edit.], Amsterdam, Elsevier, 2005

## **Institut de Statistique et de Recherche opérationnelle**

## **Université Libre de Bruxelles**

Badescu, A., Breuer, L., da Silva Soares, A., Latouche, G., Remiche, M.-A. and Stanford, D. Risk processes analyzed as fluid queues. Scandinavian Actuarial Journal 2, 127-141, 2005.

Bini, D. A., Latouche, G. and Meini, B. Stochastic Models : Fifth International Conference on Matrix-Analytic Methods, 2005.

Bini, D. A., Latouche, G. and Meini, B. Numerical Methods for Structured Markov Chains, Oxford University Press, 2005.

Bontempi, G. Structural feature selection for wrapper methods. Proceedings of ESANN 2005, European Symposium on Artificial Neural Networks, 2005.

Bontempi, G. and Le Borgne, Y. An adaptive modular approach to the mining of sensor network data. Proceedings of the Siam Data Mining 2005 Workshop on "Data mining in sensor networks".

Caelen, O. and Bontempi, G. How to allocate a restricted budget of leave-oneout assessments for e\_eective model selection in machine learning : a comparison of state-of-the-art techniques. in the proceedings of 17th Belgian-Dutch Conference on Artificial Intelligence (BNAIC2005).

da Silva Soares, A. and Latouche, G. Level-phase independence for fluid queues Stochastic Models 21, 327-341.

da Silva Soares, A. and Latouche, G. A matrix-analytic approach to fluid queues with feedback control. International Journal of Simulation : Systems, Science and Technology 6, 4-12.

Deelstra, G., Ezzine, A., Heyman, D., et Vanmaele, M. Managing value-at-risk for a bond using bond put options. Invited submission to ASMDA, Special Issue on Computational Economics, but a preliminary version has been published in the Proceedings of the International Symposium on Applied Stochastic Models and Data Analysis, Brest, 17-20 mai 2005.

Deelstra, G., Ezzine, A., Janssen, J. 2005 submitted and in preliminary version on CD-ROM Proceedings of the 8th International Congress on Insurance : Mathematics and Economics, Rome, 14-16 juin 2004.

Del Lungo, A., Louchard, G., Marini, C. and Montagna, F. The Guessing Secrets problem : a probabilistic approach. Journal of Algorithms 55, 142-176.

Desmedt, C., Loi, S. M., Haibe-Kains, B., Soree, A., Lallemand, F., Durbecq, V., Larsimont, D., Tutt, A., Ellis, P., Gillett, C., Ryder, K., Harris, A., Cardoso, F., Martiat, P. H., Piccart, M. J. and Sotiriou, C. Four genes by RT-PCR predicts 2 distant relapse for women given adjuvant tamoxifen. San Antonio Breast Cancer Symposium (Poster Session), 2005.

Droesbeke, J.-J. et Vermandele, C. (2005). La statistique au service d'un observatoire de l'enseignement supérieur, Revue de statistique appliquée LIII (3), 5-34.

Droesbeke, J.-J. et Vermandele, C. (2005). L'échec à l'université : comprendre pour mieux prévenir - Quelques réflexions sur la démarche de compréhension, Les cahiers de recherche en éducation et formation 39, 23-25.

Droesbeke, J.-J. (2005). Etonnements et paradoxes en probabilité, Les Cahiers de l'IREM 2, 145-178.

Droesbeke, J.-J. (2005), Les racines de la Société Française de Statistique, Journal de la Société Française de Statistique 146-4, 5-22.

Droesbeke, J.-J. (2005), Quelques aspects historiques du traitement des données qualitatives, dans Modèles statistiques pour données qualitatives,

Droesbeke, J.-J., Lejeune, M. et Saporta, G. Eds., Technip, Paris, 1-16.  
Dzial, T., Breuer, L., da Silva Soares, A., Latouche, G., Remiche, M.-A. Fluid queues to solve jump processes. Performance Evaluation 62, 132-146.

Forni, M., Hallin, M., Lippi, M. and Reichlin, L. The generalized dynamic factor model : one-sided estimation and forecasting. Journal of the American Statistical Association 100, 830-840.

Hallin, M. and Paindaveine, D. A\_ne-invariant aligned rank tests for the multivariate general linear model with ARMA errors. Journal of Multivariate Analysis 93, 122-163.

Hallin, M. and Paindaveine, D. Asymptotic linearity of serial and nonserial multivariate signed rank statistics. Journal of Statistical Planning and Inference 136, 1-32.

Hallin, M. and Paindaveine, D. Optimal rank-based tests for sphericity. Annals of Statistics 34, à paraître.

Hallin, M. and Saidi, A. Testing non-correlation and Granger-causality between multivariate ARMA time series. Journal of Time Series Analysis 26, 83-105.

Hallin, M., Vermandele, C. and Werker, B.J.M. Serial and nonserial sign-and-rank statistics : asymptotic representation and asymptotic normality. Annals of Statistics 34, à paraître.

Hoedemakers, T., Darkiewicz, G., Deelstra, G., Dhaene, J. et Vanmaele, M. 2005 submitted but a preliminary version with the title "Bounds for stop-loss premiums of life annuities with random interest rates" has been published on the CD-ROM Proceedings of the 8th International Congress on Insurance : Mathematics and Economics Rome, 14-16 juin 2004.

Klein, A., Mélard, G., Spreij, P. On the resultant property of the Fisher information matrix of a vector ARMA process. *Linear Algebra and its Applications* 403, 291-313.

Klein, A., Spreij, P., On the solution of Stein's equation and Fisher's information matrix of an ARMAX process, *Linear Algebra and its Applications* 396, 1-34.

Lefèvre, Cl. SIR epidemic models. In *Encyclopedia of Biostatistics*, J. Wiley, vol. 7, 4960-4966.

Lefèvre, Cl. and Picard, Ph. Nonstationarity and randomization in the Reed-Frost epidemic model. *Journal of Applied Probability* 42, 1-14.

Loi, S. M., Desmedt, C., Haibe-Kains, B., Lallemand, F., Gillett, C., Tutt, A., Ryder, K., Ellis, P., Harris, A., Smets, J., Bergh, J., Cardoso, F., Piccart, M. J. and Sotiriou, C. Predicting relapse in estrogen receptor (ER) positive breast cancer (luminal) subgroups treated with adjuvant tamoxifen. San Antonio Breast Cancer Symposium (Poster Session), 2005.

Loi, S., Piccart, M., Haibe-Kains, B., Desmedt, C., Harris, A., Bergh, J., Ellis, P., Miller, L., Liu, E. and Sotiriou, C. Prediction of early distant relapses on tamoxifen in early- stage breast cancer (BC) : a potential tool for adjuvant aromatase inhibitor (AI) tailoring. *Proceedings of the American Society of Clinical Oncology Meeting*, Orlando 2005, abstract 509, 2005.

Louchard, G. Monotone runs of uniformly distributed integer random variables : a probabilistic analysis. *Theoretical Computer Science* 346, 358-387.

Louchard, G., Prodinger, H., Ward, M. D. The number of distinct values of some multiplicity in sequences of geometrically distributed random variables. *Discrete Mathematics and Theoretical Computer Science*, AD, 231-256, 2005.

Mélard, G., Roy, R., Saidi, A. Exact Maximum Likelihood Estimation of Structured or Unit Root Multivariate Time Series Models, soumis à Computational Statistics and Data Analysis, accepté pour publication, juillet 2005, sous presse.

Mélard, G., Roy, R., and Saidi, A. Exact maximum likelihood estimation of structured and unit roots multivariate time series models. *Computational Statistics and Data Analysis*, à paraître.

- Meyer, P. E., Caelen, O. and Bontempi, G. Speeding up Feature Selection by Using an Information Theoretic Bound. In the proceedings of the 17th Belgian-Dutch Conference on Artificial Intelligence (BNAIC05), KVAB, 2005.
- Oja, H. and Paindaveine, D. Optimal signed-rank tests based on hyperplanes. *Journal of Statistical Planning and Inference* 135, 300-323.
- Reynaerts, H., Vanmaele, M., Dhaene, J. et Deelstra, G. (2006). Bounds for the price of a European-style Asian option in a binary tree model. *European Journal of Operational Research* 168/2, 322-332. (Available online since 11 septembre 2004).
- Sotiriou, C., Wirapati, P., Loi, S., Harris, A., Bergh, J., Smeds, J., Farmer, P., Praz, V., Haibe-Kains, B., Lallemand, F., Buyse, M., Piccart, M. and Delorenzi, M. Gene Expression Profiling in Breast Cancer Challenges the Existence of Intermediate Histological Grade. International Symposium on the Molecular Biology of Breast Cancer, 2005.
- Sotiriou, C., Wirapati, P., Loi, S. M., Desmedt, C., Durbecq, V., Harris, A., Bergh, J., Smeds, J., Haibe-Kains, B., Larsimont, D., Cardoso, F., Buyse, M., Delorenzi, M. and Piccart, M. Breast tumours with intermediate histological grade can be reclassified into prognostically distinct groups by gene expression profiling. San Antonio Breast Cancer Symposium (Poster Discussion), 2005.
- Sotiriou, C., Wirapati, P., Loi, S. M., Desmedt, C., Durbecq, V., Harris, A., Bergh, J., Smeds, J., Haibe-Kains, B., Larsimont, D., Cardoso, F., Buyse, M., Delorenzi, M. and Piccart, M. Better characterization of estrogen receptor (ER) positive luminal subtypes using genomic grade. San Antonio Breast Cancer Symposium (Oral Presentation), 2005.
- Sotiriou, C., Wirapati, P., Loi, S., Harris, V., Bergh, J., Smeds, J., Farmer, P., Praz, V., Haibe-Kains, B., Lallemand, F., Buyse, M., Piccart, M. and Delorenzi, M. Gene Expression Profiling in Breast Cancer Challenges the Existence of Intermediate Histological Grade. *Journal of National Cancer Institute* (submitted paper), 2005.
- Stanford, D. A., Latouche, G., Woolford, D. G., Boychuk, D., Hunchak, A. Erlangized. Fluid queues with application to uncontrolled fire perimeter. *Stochastic Models* 21, 631-642.
- Stanford, D., Avram, F., Badescu, A., Breuer, L., da Silva Soares, A. and Latouche, G. Phase-type approximations to finite-time ruin probabilities in the Sparre Andersen and stationary renewal risk models. *ASTIN Bulletin* 35, 131-144.
- Stefan, M. (2005). Prediction of a small area mean under an informative sampling design, Comparative socio-economic research : theory, method and analysis (Proceedings), Universita di Roma La Sapienza, September 2005, 187-198.
- Vanmaele, M., Deelstra, G., Liinev, J. Dhaene, J. et Goovaerts, M.-J. (2006). Bounds for the price of discrete arithmetic Asian options. *Journal of Computational and Applied Mathematics* 185/1, 51-90. Published online since 31 march 2005.

## **Unité de Statistique, Informatique et Mathématique appliquées**

### **Faculté universitaire des Sciences agronomiques de Gembloux**

#### **1. Productions dans des revues internationales ou nationales avec comité de lecture**

- AKOSSOU A.Y.J., PALM R. [2005]. Conséquences de la sélection de variables sur l'interprétation des résultats en régression linéaire multiple. *BASE* 9 (1), 11-18.
- ARNAUD L., BROSTAUX Y., LALLEMAND S., HAUBRUGE E. [2005]. Reproductive strategies of *Tribolium* flour beetles. *J. Insect Sci.* 5, 33, 12 p.
- ARNAUD L., TRAN THI LAN H., BROSTAUX Y., HAUBRUGE E. [2005]. Efficacy of diatomaceous earth formulations admixed with grain against populations of *Tribolium castaneum*. *J. Stored Prod. Res.* 41, 2, 121-130.
- CARLETTI I., CLAUSTRIAUX J.J. [2005]. Analyse de la variance ou méthodes de transformation en rangs alignés : quelle méthode utiliser quand des conditions d'application ne sont pas rencontrées ? *Bulletin USAMV-CN*, 62, 1-6.
- CLAUSTRIAUX J.J., CORDIER L., DUQUESNE B., LEBAILLY P., PALM R. [2004]. L'Observatoire de la Consommation Alimentaire en Région Wallonne : pourquoi, comment ? *BASE*, 9(3), 207-212.
- DUYME F., CLAUSTRIAUX J.J., DAUDIN J.J. [2005]. Qualité de validation des modèles de régression logistique binaire. *Rev. Stat. Appl.* 53, 3, 91-102.
- FANFAN P.N., MABON N., CARLETTI I., CLAUSTRIAUX J.J., THONART P., LOGNAY G., COPIN A., BARTHÉLEMY J.P. [2005]. New model for performance prediction in fixed-bed reactors based on the approach of the unused bed zone. *Water Research* 39, 4004-4010.
- GLÈLÉ KAKAÏ R., PALM R. [2005]. Minimal error rate of linear, quadratic and logistic rules in discriminant analysis. *Global J. Math. Sci.* 4, 1-2, 89-93.
- GLÈLÉ KAKAÏ R., SINSIN B., PALM R. [2005]. A stepwise selection technique of the most discriminant parameters of two groups applied to *Isoberlinia* stands in Benin. *Global J. Math. Sci.* 4, 1-2, 107-111.

#### **2. Communications présentées lors des réunions scientifiques ou technologiques en Belgique et à l'étranger**

- BIEVELET C., PALM R., CLAUSTRIAUX J.J. [2005]. Observatory of food consumption in Walloon Region (Belgium). In : *Agrarian Prospects XIV*, Prague (Tchéquie), 829-833.

CLAUSTRIAUX J.J. [2005]. La statistique dans les pays en développement : regard et perspective. *Bull. Séanc. Acad. R. Sci. Outre-Mer*, 51, 3, 203-211.

CLAUSTRIAUX J.J. [2005]. *La statistique dans les pays en développement : regard et perspective*. 1<sup>er</sup> Colloque Euro-méditerranéen en Biologie végétale et Environnement. Annaba (Algérie), 10 p.

LEBAILLY P., CLAUSTRIAUX J.J., DUQUESNE B., PALM R. [2005]. *Les productions animales en Région wallonne, d'une économie de l'offre à une économie de la demande*. In: L'élevage : hier, aujourd'hui, demain. Quelles attentes ? Pour quels enjeux ? Gembloux, Dixième Carrefour des Productions Animales, 5 p.

MINET V., PALM R. [2005]. *Détournement d'un outil formatif en première année universitaire*. Reims, 18<sup>ème</sup> Colloque international de l'ADMEE, 8 p.

### **3. Les thèses de doctorat**

AKOSSOU A. [2005]. *Impact de la structure des données sur les prédictions en régression linéaire multiple*. Gembloux, Faculté universitaire des Sciences agronomiques, 209 p.

BROSTAUX Y. [2005]. *Etude du classement par forêts aléatoires d'échantillons perturbés à forte structure d'interaction*. Gembloux, Faculté universitaire des Sciences agronomiques, 170 p.

CARLETTI I. [2005]. *Etude de méthodes de transformation en rangs et en rangs alignés comme alternatives non paramétriques à l'analyse de la variance pour les plans factoriels équilibrés à deux effets fixes*. Gembloux, Faculté universitaire des Sciences agronomiques, 215 p.

GLÉLÉ KAKAÏ R. [2005]. *Comparaison empirique des règles de classement et des estimateurs des taux d'erreur en analyse discriminante*. Gembloux, Faculté universitaire des Sciences agronomiques, 202 p. + annexes.

### **4. Rapports d'étude ou d'activités de recherche**

HEJMANOWSKA B., PALM R., OSZCZAK S., CIECKO A. [2005]. *Validation of methods for measurements of land parcel areas*. Final report. AGH University of Science and Technology. Faculty of Mining Surveying and Environmental Engineering, Department of Photogrammetry and remote Sensing. Cracow, Poland, 166 p.

## **Publication list of CenStat**

### **Hasselt University**

- Braekers, R. and Veraverbeke, N. (2005). Bootstrapping the conditional survival function estimator in the partial Koziol-Green model. *Journal of Nonparametric Statistics*, 17, 299-318.
- Braekers, R. and Veraverbeke, N. (2005). Cox's regression model under partially informative censoring. *Communications in Statistics - Theory and Methods*, 34, 1793-1811.
- Braekers, R. and Veraverbeke, N. (2005). A copula-graphic estimator for the conditional survival function under dependent censoring. *Canadian Journal of Statistics*, 33, 429-447.
- Janssen, P., Swanepoel, J. and Veraverbeke, N. (2005). Bootstrapping modified goodness-of-fit statistics with estimated parameters. *Statistics and Probability Letters*, 71, 111-121.
- Cao, R., Janssen, P. and Veraverbeke, N. (2005). Relative hazard rate estimation for right censored and left truncated data. *TEST*, 14, 257-280.
- Cao, R., López-de-Ullibarri, I., Janssen, P. and Veraverbeke N. (2005). Presmoothed Kaplan-Meier and Nelson-Aalen estimators. *Journal of Nonparametric Statistics*, 17, 31-56.
- Duchateau, L. and Janssen, P. (2005). Pairwise nonparametric equivalence tests in 3x3 crossover trials: should we adjust for period? *Statistics in Medicine*, 24, 1525-1536.
- Duchateau, L., Opsomer, G., Dewulf, J. and Janssen, P. (2005). The nonlinear effect (determined by the penalised partial likelihood approach) of milk-protein concentration on time to first insemination in Belgian dairy cows. *Preventive Veterinary Medicine*, 68, 81-90.
- Duchateau, L. and Janssen, P. (2005). Understanding heterogeneity in mixed, generalized mixed and frailty models. *The American Statistician*, 59, 143-146.
- Legrand, C., Ducrocq, V., Janssen, P., Sylvester, R. and Duchateau, L. (2005). A Bayesian approach to jointly estimate center and treatment by center heterogeneity in a proportional hazards model. *Statistics in Medicine*, 24, 3789-3804.
- Hens, N., Aerts, M., Molenberghs, G., Thijs, H. and Verbeke, G. (2005). Kernel weighted influence measures. *Computational Statistics and Data Analysis*, 48, 467-487.

- De Ridder, J., Molenberghs, G. and Aerts, C. (2005). Estimating stellar oscillation-related parameters and their uncertainties with the moment method. *Applied Statistics*, 54, 333-348.
- Molenberghs, G. (2005). Presidential Address: XXII International Biometric Conference, Cairns, Australia, July 2004: Biometry, biometrics, biostatistics, bioinformatics, ... Bio-X. *Biometrics*, 61, 1-9.
- Vangeneugden, T., Laenen, A., Geys, H., Renard, D. and Molenberghs, G. (2005). Applying concepts of generalizability theory on clinical trial data to investigate sources of variation and their impact on reliability. *Biometrics*, 61, 295-304.
- Katsambas, A., Abeck, D., Haneke, E., van de Kerkhof, P., Burzykowski, T., Molenberghs, G. and Marynissen, G. (2005). The effects of foot disease on quality of life: results from the Achilles Project. *Journal of the European Academy of Dermatology and Venereology*, 19, 191-195.
- Wouters, L., Göhlmann, H.W., Bijnens, L., Kass, S.U., Molenberghs, G. and Lewi, P.J. (2005). Response to "use of principal component analysis and of the GE-biplot for the graphical exploration of gene expression data.". *Biometrics*, 61, 632-634.
- Jansen, I., Hens, N., Molenberghs, G., Aerts, M., Verbeke, G. and Kenward, M.G. (2005). The nature of sensitivity in missing not at random models. *Computational Statistics and Data Analysis*, 50, 830-858.
- Shkedy, Z., Molenberghs, G., Van Craenendonck, H., Aerts, N., Steckler, T. and Bijnens, L. (2005). A hierarchical binomial-Poisson model for the analysis of a cross-over design for correlated binary data when the number of trials is dose-dependent. *Journal of Biopharmaceutical Statistics*, 15, 225-239.
- Serroyen, J., Molenberghs, G., Verhoye, M., Van Meir, V. and Van der Linden, A. (2005). Dynamic manganese enhanced (DME) MRI signal intensity processing based on non-linear mixed modeling to study changes in neuronal activity. *Journal of the Agricultural, Biological, and Environmental Statistics*, 10, 170-183.
- Verbeke, G. and Molenberghs, G. (2005). Longitudinal and incomplete clinical studies. *Metron*, 63, 143-176.
- Shkedy, Z., Straetemans, R., Molenberghs, G., Desmidt, M., Vinken, P., Goeminne, N., Coussemant, W., Van den Poel, B. and Bijnens, L. (2005). Modeling anti-KLH ELISA data using two-stage and mixed effects models in support of immunotoxicological studies. *Journal of Biopharmaceutical Statistics*, 15, 205-223.
- Shkedy, Z., Vandersmissen, V., Molenberghs, G., Van Craenendonk, H. and Aerts, N., Steckler, T., and Bijnens, L. (2005). Behavioral testing of antidepressant compounds: an analysis of crossover design for correlated binary data. *Biometrical Journal*, 47, 286-298.

- Shkedy, Z., Aerts, M., Molenberghs, G., Beutels, P. and Van Damme, P. (2005). Modelling age-dependent force of infection from prevalence data using fractional polynomials. *Statistics in Medicine*, 00, 000-000.
- Vandenbroeck, P., Wouters, L., Molenberghs, G., Van Gestel, S., Bijnens, L. (2005). Teaching statistical thinking to life scientists - a case-based approach. *Journal of Biopharmaceutical Statistics*, 16, 61-75.
- Alonso, A., Molenberghs, G., Geys, H. and Buyse, M. (2005). A unifying approach for surrogate marker validation based on Prentice's criteria. *Statistics in Medicine*, 00, 000-000.
- Ombelet, W., Peeraer, K., De Sutter, P., Gerris, J., Bosmans, E., Martens, G., Ruyssinck, G., Defoort, P., Molenberghs, G., Gyselaers, W. (2005). Perinatal outcome of ICSI pregnancies compared with a matched group of natural conception pregnancies in Flanders (Belgium): a cohort study. *Reproductive Biomedicine Online*, 11, 244-253.
- Ombelet, W., Cadron, I., Gerris, J., De Sutter, P., Bosmans, E., Martens, G., Ruyssinck, G., Defoort, P., Molenberghs, G., Gyselaers, W. (2005). Obstetric and perinatal outcome of 1655 ICSI and 3974 IVF singleton and 1102 ICSI and 2901 IVF twin births: A comparative analysis. *Reproductive Biomedicine Online*, 11, 76-85.
- Ombelet, W., Martens, G., De Sutter, P., Gerris, J., Bosmans, E., Ruyssinck, G., Defoort, P., Molenberghs, G. and Gyselaers, W. (2005). Perinatal outcome of 12,021 singleton and 3,108 twin births after non-IVF assisted reproduction: a cohort study. *Human Reproduction*, 00, 000-000.
- Vansteelandt, S., Goetghebeur, E., Kenward, M.G. and Molenberghs, G. (2005). Ignorance and uncertainty regions as inferential tools in a sensitivity analysis. *Statistica Sinica*, 00, 000-000.
- Boelaert, F., Speybroeck, N., de Kruif, A., Aerts, M., Burzykowski, T., Molenberghs, G. and Berkvens, D.L. (2005). Risk factors for bovine herpesvirus-1 seropositivity. *Preventive Veterinary Medicine*, 69, 285-295.
- Aelvoet, W., Molenberghs, G. and van Sprundel, M. (2005). Mortality Statistics in Belgium 1980-1997. Quality of coding. *Archives of Public Health*, 00, 000-000.
- Van Steen, K., Raby, B.A., Molenberghs, G., Thijs, H., De Wit, M. and Peeters, M. (2005). An equivalence test for comparing DNA sequences. *Pharmaceutical Statistics*, 00, 000-000.
- Molenberghs, G. and Verbeke, G. (2005). The Diggle-Kenward model for dropout. *Encyclopedia of Measurement and Statistics*, 000-000.

- Beunckens, C., Molenberghs, G. and Kenward, M.G. (2005). Direct likelihood analysis versus simple forms of imputation for missing data in randomized clinical trials. *Clinical Trials*, 2, 379-386.
- Mathei, C., Shkedy, Z., Denis, B., Kabali, C., Aerts, M., Molenberghs, G., Van Damme, P. and Buntinx, F. (2005). Evidence for a substantial role of sharing of injection paraphernalia other than syringes/needles to the spread of hepatitis C among injecting drug users. *Journal of Viral Hepatitis*, 00, 000-000.
- Molenberghs, G., Imrey, P., Drake, C. (2005). Letter to the Editor. *Journal of the American Medical Association*, 294, 2575-2577.
- Fitzmaurice, G., Lipsitz, S., Molenberghs, G. and Ibrahim, J.G. (2005). A protective estimator for longitudinal binary data subject to nonignorable non-monotone missingness. *Journal of the Royal Statistical Society, Series A*, 168, 723-735.
- Laenen, A., Vangeneugden, T., Geys, H. and Molenberghs, G. (2005). Generalized reliability estimation using repeated measurements. *British Journal of Mathematical and Statistical Psychology*, 00, 000-000.
- Molenberghs, G. (2005). Discussion of Davidian, M., Tsiatis, A.A., and Leon, S.: ``Semiparametric estimation of treatment effect in a pretest-posttest study with missing data''. *Statistical Science*, 00, 000-000.
- Molenberghs, G. and Verbeke, G. (2005). Discussion of Lee, Y. and Nelder, J.A.: ``Likelihood for random-effect models''. *Sort*, 29, 000-000.
- Molenberghs, G. and Verbeke, G. (2005). Discussion of Lee, Y. and Nelder, J.A.: ``Double hierarchical generalized linear models''. *Applied Statistics*, 00, 000-000.
- Molenberghs, G. (2004). Book Review of ``Fitzmaurice, G.M., Laird, N.M., and Ware, J.H. (2005). Applied Longitudinal Data Analysis''. *Journal of the American Statistical Association*, 00, 000-000.
- Straetemans, R., O'Brien, T., Wouters, L., Van Dun, J., Janicot, M., Bijnens, L., Burzykowski, T., Aerts, M. (2005). Design and analysis of drug combination experiments. *Biometrical Journal* 47, 299-308.
- De Mayer, J.H., Straetemans, R., Schuurkes, J.A.J., Lefebre, R.A. (2005). Porcine left atrial and sinoatrial 5-HT<sub>4</sub> receptor-induced responses: fading of the response and influence of development. *British Journal of Pharmacology*, 1-18.
- Dilba, G. and Aerts, M. (2004). A comparative study of models for correlated binary data with applications to health services research. *SINET: Ethiopian Journal of Science* 27, 97-104.
- Moons, E., Wets, G., Aerts, M., Arentze, T., Timmermans, H. (2005). The impact of simplification in a sequential rule-based model of activity-scheduling behaviour. *Environment and Planning A*, 37, 551-568.

- Colpaert, J., Adriaensen, K., Muller, L.A.H., Lambaerts, M. Faes, C. Carleer, R. Vangronsveld, J. (2005). Element profiles and growth in Zn-sensitive and Zn-resistant suilloid fungi. *Mycorrhiza*, 8, 628-34.
- Buntinx, F., Wachana, R., Bartholomeeusen, S., Sweldens, K. and Geys, H. (2005). Is herpes zoster a predictor for occult or subsequent malignancy? *British Journal of General Practice*, 55, 102-107.
- Chang-Yeon, K., Faes, C., Vandenbroucke, J., Buntinx, F. (2005). The denominator in general practice, a new approach from the intego database. *Family Practice*, 22, 442-447.
- Nguti, R., Burzykowski, T., Rowlands, J., Renard, D., Janssen, P. (2005). Joint modelling of repeated measurements and event time: Application to performance traits and survival of lambs bred in sub-humid tropics. *Genetics Selection Evolution*, 37, 175-197.
- Wang, L. (2005). A note on the choice between two loss functions in Bayesian analysis. *Soochow Journal of Mathematics*, 31, 301-307.
- Wang, L. (2005). Bayes and empirical Bayes tests for the life parameter. *Applicationes Mathematicae*, 32, 133-143.
- van Breda, S., van Agen, E., van Sanden, E., Burzykowski, T., Kienhuis, A., Kleinjans, I., van Delft, J. (2005). Vegetables affect the expression of genes involved in anticarcinogenic processes in the colonic mucosa of C57BL/6 female mice. *Journal of Nutrition*, 135, 1879-1888.
- van Breda, S., van Agen, E., van Sanden, S., Burzykowski, T., Kienhuis, A., Kleinjans, J., van Delfst, J. (2005). Vegetables affect the expression of genes involved in carcinogenic and anticarcinogenic processes in the lungs of female C57BL/6 mice. *Journal of Nutrition*, 135, 2546-2452.
- Collette, L., Burzykowski, T., Carroll, K.J., Newling, D., Morris, T., Schröder, F.H. (2005). Is PSA a valid surrogate endpoint for survival in hormonally treated patients with metastatic prostate cancer? *Journal of Clinical Oncology*, 23, 6139-6148.
- Cortiñas Abrahantes, J., Burzykowski, T. (2005). A version of the EM algorithm for proportional hazards model with random effects. *Biometrical Journal*, 47, 847-862.
- Burzykowski, T. (2005). New experimental techniques in genomics: challenges for data processing and analysis. *Annual Proceedings of Medical Science*, 50 (suppl. 2), 12-14.
- Vinh-Hung, V., Burzykowski, T., Van de Steene, J., Voordeckers, M., Lamote, J., Storme, G. (2005). Statistical interaction in the survival analysis of early breast cancer using registry data: role of breast conserving surgery and radiotherapy. *Tumori*, 91, 9-14.

Mossong, J., Putz, L., Shkedy, Z. and Schneider, F. (2005). Seroepidemiology of diphtheria and pertussis in Luxemburg in 2000. *Epidemiological Infections*, 29, 1-6.

Kadankov, V.F., and Kadankova, T.V. (2005). On the distribution of the first exit time from an interval and the value of the overshoot through the boundaries for processes with independent increments and random walks. *Ukrain Mathematical Journal*, 10 (57), 1359-1384.

Kadankov, V.F. and Kadankova, T.V. (2005). Intersections of an interval by a process with independent increments. *Theory of Stochastic Processes*, 11(27), 54-68.

Sargent, D., Wieand, S., Haller, D.G., Gray, R., Benedetti, J., Buyse, M., Labianca, R., Seitz, J.F., O'Callaghan, C.J., Francini, G., Grothey, A., O'Connell, M., Catalano, P.J., Blanke, C.D., Kerr, D., Green, E., Wolmark, N., Andre, T., Goldberg, R.M., de Gramont, A. (2005). Disease-free survival (DFS) vs. Overall survival (OS) as a primary endpoint for adjuvant colon cancer studies: individual patient data from 20,898 patients on 18 randomized trials. *Journal of Clinical Oncology*, 23, 8664-8670.

Nollet, N., Maes, D., Duchateau, L., Hautekiet, V., Houf, K., Van Hoof, J., De Zutter, L., De Kruif, A., Geers, R. (2005). Discrepancies between the isolation of *Salmonella* from mesenteric lymph nodes and the results of serological screening in slaughter pigs. *Veterinary Research*, 36, 545-555.

Gabriel, S., Dorny, P., Duchateau, L., Phiri, I.K., Chembensofu, M., Vercruyse, J. (2005). The influence of colostrum on infection of calves around 7 months of age with *Schistosoma mattheei*. *Veterinary Parasitology*, 129, 55-60.

Vandaele, L., Verberckmoes, S., El Amiri, B., Sulon, J., Duchateau, L., Van Soom, A., Beckers, J.F., de Kruif, A. (2005). Use of homologous radioimmunoassay (RIA) to evaluate the effect of maternal and foetal parameters on pregnancy-associated glycoprotein (PAG) concentrations in sheep. *Theriogenology*, 63, 1914-1924.

Gelman, A., Van Mechelen, I., Verbeke, G., Heitjan, D.F. and Meuldres, M. (2005). Multiple imputation for model checking: completed data plots with missing and latent data. *Biometrics*, 61, 74-85.

Verbeke, G., Fieuws, S., Lesaffre, E., Kato, B.S., Foreman, M.D., Broos, P.L.O. and Milisen K. (2005). A comparison of procedures to correct for baseline differences in the analysis of continuous longitudinal data: A case study. *Applied Statistics*, in press.

Fieuws, S. and Verbeke, G. (2005). Pairwise fitting of mixed models for the joint modelling of multivariate longitudinal profiles. *Biometrics*, in press.

Teurlinckx, F., Rijmen F., Verbeke, G. and De Boeck, P. (2005). Statistical inference in generalised linear mixed models: a review. *British Journal of Mathematical and Statistical Psychology*, in press.

Baay, M.F., Tjalma, W.A., Lambrechts, H.A., Pattyn, G.G., Lardon, F., Weyler, J., Van Royen, P. Van Marck, E.A., Vermorken, J.B. (2005). Combined Pap and HPV testing in primary screening for cervical abnormalities: should HPV detection be delayed until age 35? European Journal of Cancer, 41(17), 2704-2708.

Romijn, S., Hendriks, J.M.H., van Putte, B.P., Weyler, J., Guetens, G., de Boeck, G., de Brujin, E.A., van Schil P.E.Y. (2005). Anterograde versus retrograde isolated lung perfusion with melphalan in the WAG-Rij rat. European Journal of Cardiothoracic Surgery, 27, 6, 1083-1085.

Romijn, S., Hendriks, J.M.H., van Putte, B.P., Weyler, J., Guetens, G., de Boeck, G., van Schil P.E.Y. (2005). Regional differences of melphalan lung levels after isolated lung perfusion in the rat. Journal of Surgical Research, 125, 157-160.

Mwalili, S.M., Lesaffre, E., Declerck, D. (2005). A Bayesian ordinal logistic regression model to correct for interobserver measurement error in a geographical oral health study. Applied Statistics, 54, 77-93.

Komárek, A., Lesaffre, E., Harkanen, T., Declerck, D., Virtanen, J.I. (2005). A Bayesian analysis of multivariate doubly-interval-censored dental data. Biostatistics, 6, 145-155.

Leroy, R., Bogaerts, K., Lesaffre, E., Declerck, D. (2005). Multivariate survival analysis for the identification of factors associated with cavity formation in permanent first molars. European Journal of Oral Sciences, 113, 145-152.

Veraverbeke, N. (2005). Bootstrapping in survival analysis. In: Encyclopedia of Biostatistics, Second edition. Editors: P. Armitage and T. Colton. John Wiley, Chichester. Vol. 1, pp. 541-547. (ISBN 0-470-84907-X)

Veraverbeke, N. (2005). Nonparametric regression with censored data. In: Liber Amicorum R. Delanghe. Editors: F. Brackx and H. De Schepper. Academia Press, Gent, pp. 239-248 (ISBN 90-382-0853-7)

Veraverbeke, N. (2005). Hazard rate estimation. In: Encyclopedia of Statistical Sciences, 2nd edition. Editors: S. Kotz, C.B. Read, N. Balakrishnan and B. Vidakovic. John Wiley (6p) (ISBN 0-471-15044-4)

Molenberghs, G. (2005). Intention-to-treat. In: Encyclopedia of Statistics in Behavioral Sciences, Volume 2 (E-L), 928-929.

Callaert, H., Bekaert, H., Goethals, B., Provoost, L., Vancaudenberg, M. (2005). Exploratieve statistiek voor het secundair onderwijs. UHasselt, Diepenbeek. Depotnummer D/2005/2451/45.

Molenberghs, G., Beuckens, C., Jansen, I., Thijs, H., Van Steen, K., Verbeke, G., and Kenward, M.G. (2005). The analysis of incomplete data. In: Pharmaceutical

Statistics with SAS. Chuang-Stein, C., and D'Agostino, R. (Eds.). Cary, NC: SAS Publishing.

Molenberghs, G., Beunckens, C., Jansen, I., Thijs, H., Verbeke, G. and Kenward, M.G. (2005). Incomplete data. In: Proceedings of the Journées d'Etude en Statistique. Marseille, December 2004.

Verbeke, G. and Molenberghs, G. (2005). Longitudinal data analysis. In: Proceedings of the Journées d'Etude en Statistique. Marseille, December 2004.

Molenberghs, G., Buyse, M. and Burzykowski, T. (2005). Setting the scene. In: The evaluation of surrogate endpoints. Burzykowski, T., Molenberghs, G., and Buyse, M. (Eds). New York: Springer-Verlag, 7-12.

Molenberghs, G., Buyse, M. and Burzykowski, T. (2005). Notation and motivating studies. In: The evaluation of surrogate endpoints. Burzykowski, T., Molenberghs, G., and Buyse, M. (Eds.). New York: Springer-Verlag, pp. 53-65.

Molenberghs, G., Buyse, M. and Burzykowski, T. (2005). The history of surrogate endpoint validation. In: The evaluation of surrogate endpoints. Burzykowski, T., Molenberghs, G., and Buyse, M. (Eds.). New York: Springer-Verlag, pp.67-82.

Molenberghs, G., Buyse, M. and Burzykowski, T. (2005). A meta-analytic validation framework for continuous outcomes. In: The evaluation of surrogate endpoints. Burzykowski, T., Molenberghs, G. and Buyse, M. (Eds). New York: Springer-Verlag, pp. 95-120.

Cortiñas Abrahantas, J., Burzykowski, T., and Molenberghs, G. (2005). The choice of units. In: The evaluation of surrogate endpoints. Burzykowski, T., Molenberghs, G. and Buyse, M. (Eds). New York: Springer-Verlag, pp. 121-141.

Molenberghs, G., Beunckens, C., Thijs, H., Jansen, I., Verbeke, G., Kenward, M.G. and Van Steen, K. (2005). Analysis of incomplete data. In: SAS System for Clinical Trials II. Dmitrienko, A. (Ed.). Cary: SAS Publishing.

Renard, D. and Geys, H. (2005). Meta-analytic validation with binary outcomes. In: Surrogate Marker Evaluation. Burzykowski, T., Molenberghs, G., Buyse, M. (Eds). New York: Springer-Verlag, pp 153-161.

Renard, D. (2005). A combination of longitudinal and survival endpoints. In: Surrogate Marker Evaluation. Burzykowski, T., Molenberghs, G., Buyse, M. (Eds). New York: Springer-Verlag, pp. 219-229.

Cortiñas Abrahantes, J. (2005). Validation in the case of two failure-time endpoints. In: The Evaluation of Surrogate Endpoints. Burzykowski, T., Molenberghs, G. and Buyse, M. (Eds). New York: Springer-Verlag, pp. 163-194.

Van Sanden, S., Lin, D., Burzykowski, T. (2005). Performance of classification methods in microarray setting. Lecture notes of the ICB Seminar: Statistics and Clinical Practice. Warsaw: International Centre of Biocybernetics, pp. 48-53.

Alonso Abad, A., Geys, H., Vangeneugden, T. (2005). Repeated measures and surrogate endpoint validation. In: The Evaluation of Surrogate Endpoints. Burzykowski, T., Molenberghs, G., Buyse, M. (Eds). New York: Springer Verlag, pp. 231-251.

Vangeneugden, T., Alonso Abad, A., Geys, H., Laenen, A. (2005). Surrogate marker validation in mental health. In: The Evaluation of Surrogate Endpoints. Burzykowski, T., Molenberghs, G., and Buyse, M. (Eds). New York: Springer Verlag, pp. 271-292.

Geys, H. (2005). Validation using single-trial data: mixed binary and continuous outcomes. In: The evaluation of surrogate endpoints, (Eds. Burzykowski, Molenberghs and Buyse), Springer, 83-92.

Shkedy, A. and Torres Barbosa, F. (2005). Bayesian evaluation of surrogate endpoints. In: The Evaluation of Surrogate Endpoints. Burzykowski, T., Molenberghs, G. and Buyse, M. (Eds). New York: Springer-Verlag, pp 253-270.

Buyse, M. (2005). Fraud detection. In: Encyclopaedic Companion to Medical Statistics Everitt, B., Palmer, C. (Eds). Arnold Publishers Ltd, London.

Buyse, M. (2005). Multicenter trials. In: Encyclopaedic Companion to Medical Statistics (Everitt, B., Palmer, C. (Eds). Arnold Publishers Ltd, London.

Burzykowski, T., Molenberghs, G., Abeck, D., Haneke, E., Hay, R., Katsambas, A., Roseeuw, D. van de Kerkhof, P. van Aelst, R., Marynissen, F. (2005). Hoge prevalentie voetinfecties in Europa: het Achilles project. (High prevalence of foot diseases in Europe: the Achilles Project). Skin, 8, 111-116.

Jansen, I., Beunckens, C., Molenberghs, G., Verbeke, G., and Mallinckrodt, C. (2005). Generally applicable modes of analyses for incomplete binary longitudinal clinical trial data. 2004 Proceedings of the American Statistical Association, Biopharmaceutical section [CD-ROM], Alexandria, VA: American Statistical Association, pp. 689-696.

Mallinckrodt, C.H., Detke, M.J., Kaiser, C.J., Watkin, J.G., Molenberghs, G. and Carroll, R.J. (2005). Comparing methodologies for assessing onset of action in neuropsychiatric clinical trials. 2004 Proceedings of the American Statistical Association, Biopharmaceutical Section [CD-ROM], Alexandria, VA: American Statistical Association, pp. 772-781.

Thijs, H., Molenberghs, G., Beunckens, C., Kenward, M.G., Mallinckrodt, C. and Carroll, R.J. (2005). Missing data: a sensitivity analysis. Proceedings of Quality of Life Symposium.

Hens, N., Faes, C., Aerts, M., Shkedy, Z., Geys, H., Mintiens, K., Laevens, H., Boelaert, F. (2005). Modelling the Herd-specific force of infection for BoHV-1: the influence of missing data. In: Proceedings of the Annual Conference of the Society for Veterinary Epidemiology and Preventive Medicine, Nairn, Scotland. (ISBN: 0-948073-69-1)

Faes, C., Hens, N., Aerts, M., Shkedy, Z., Geys, H., Mintiens, K., Laevens, H., Boelaert, F. (2005). Modelling the Herd-specific force of infection for BoHV-1: the influence of clustering. In: Proceedings of the Annual Conference of the Society for Veterinary Epidemiology and Preventive Medicine, Nairn, Scotland. (ISBN: 0-948073-69-1)

Aerts, M., Bollaerts, K., Faes, C., Hens, N. and Shkedy, Z. (2005). Estimation of the force of infection and related parameters. In: Proceedings of the VEE-studiedag 2005. Diepenbeek, Belgium. R. Geers and J. Vanden heede (Eds). Vereniging voor Epidemiologie & Economie. (ISBN: 90-5989-088-4)

Hens, N., Faes, C., Bollaerts, K., Aerts, M. and Skhedy Z. (2005). Estimating the force of infection from serological data: the impact of clustering, incomplete data and diagnostic uncertainty. In: Proceedings of the VEE-studiedag 2005. Diepenbeek, Belgium. R. Geers and J. Vanden heede (Eds). Vereniging voor Epidemiologie & Economie. (ISBN: 90-5989-088-4)

## Books

Burzykowski, T., Molenberghs, G., and Buyse, M. (2005). The evaluation of surrogate endpoints. New York: Springer-Verlag. ISBN: 0-387-20277-3

Molenberghs, G. and Verbeke, G. (2005). Discrete Longitudinal Data. New York: Springer-verlag. ISBN 0-387-25144-8

Dmitrienko, A., Molenberghs, G., Christy Chuang-Stein, J.L. and Offen, W.W. (2005). Analysis of Clinical Trial Data Using SAS: A Practical Guide. Cary: SAS Publishing. ISBN: 1-59047-504-6

## **Publication list of Universitair Centrum voor Statistiek**

### **K.U.Leuven**

- Callens, M., and Croux, C. (2005), ``Performance of Likelihood-Based Estimation Methods for Multilevel Binary Regression Models", *Journal of Statistical Computation and Simulation*, 75(12), 1003-1017.
- Callens, M., and Croux, C. (2005), ``The Impact of Education on Third Births. A Multilevel Discrete-Time Hazard Analysis", *Journal of Applied Statistics*, 32 (10), 1035-1050.
- Croux, C., and Joossens, K. (2005), ``Influence of Observations on the Misclassification Probability in Quadratic Discriminant Analysis", *Journal of Multivariate Analysis*, 96, 384-403.
- Serneels, S., Croux, C., Filzmoser, P., and Van Espen, P.J. (2005), ``Partial Robust M -Regression", *Chemometrics and Intelligent Laboratory Systems*, 79, 55-64). Croux, C., and Ruiz-Gazen, A. (2005), ``High Breakdown Estimators for Principal Components: the Projection-Pursuit Approach Revisited", *Journal of Multivariate Analysis*, 95, 206-226.
- Serneels, S., Filzmoser, P., Croux, C., and Van Espen, P.J. (2005), ``Robust Continuum Regression," *Chemometrics and Intelligent Laboratory Systems*, 76 (2), 197-204.
- Lemmens, A., Croux, C., and Dekimpe, M.G. (2005), ``On the predictive content of production surveys: a pan-European study", *International Journal of Forecasting*, 2, 363-367.
- Croux, C., and Joossens, K. (2005), ``Inleiding tot de Robuuste Statistiek: Elementen van theorie en bedrijfseconomische toepassingen", *Tijdschrift voor Economie en Management*, 2, 287-310
- Branco, J.A. , Croux, C., Filzmoser, P., and Oliviera, M.R. (2005), ``Robust Canonical Correlations: A Comparative Study", *Computational Statistics*, 20, 203-229.
- Actuarial Theory for Dependent Risks Measures, Orders and Models. M. Denuit, J. Dhaene, M. Goovaerts, R. Kaas (2005). Wiley, pp. 440.
- Comonotonic approximations for optimal portfolio selection problems. [PDF version] J. Dhaene, S. Vanduffel, M. Goovaerts, R. Kaas & D. Vyncke (2005). *Journal of Risk and Insurance* 72(2), 253-301.

Comparing approximations for risk measures of sums of non-independent lognormal random variables. [PDF version] S. Vanduffel, T. Hoedemakers & J. Dhaene (2005). North American Actuarial Journal, vol. 9(4), 71-82.

Discussion of 'A Bayesian generalized linear model for the Bornhuetter-Ferguson method of claims reserving'. [PDF version] K. Antonio, J. Beirlant & T. Hoedemakers (2005). North American Actuarial Journal 9(3), 143-145.

Is one Euro of actuaries worth the same as one Euro of financial economists? [PDF version] J. Dhaene, L. Henrard & S. Vanduffel (2005). Contingencies, American Society of Actuaries, November/December 2005, 17-18, a translation in Slovenian appeared in Finance (Slovenian newspaper), April 5, 2005.

On the distribution of discounted loss reserves using generalized linear models. [PDF version] T. Hoedemakers, J. Beirlant, M. Goovaerts & J. Dhaene (2005). Scandinavian Actuarial Journal 2005(1), 25-45.

On the evaluation of 'saving-consumption' plans. [PDF version] S. Vanduffel, J. Dhaene & M. Goovaerts (2005). Journal of Pension Economics and Finance 4(1), 17-30.

On the use of copulas for calculating the present value of a general cash flow. [PDF version] M. Goovaerts, A. De Schepper, Y. Hua, G. Darkiewicz & D. Vyncke (2005). Tijdschrift voor Economie en Management, L(1), 69-93.

Optimal portfolio selection for cash-flows with bounded Capital at Risk. [PDF version] D. Vyncke, M. Goovaerts, J. Dhaene & S. Vanduffel (2005). Tijdschrift voor Economie en Management, L(1), 103-114.

Static hedging of Asian options under Lévy models: The comonotonicity approach. [PDF version] H. Albrecher, J. Dhaene, M. Goovaerts & W. Schoutens (2005). The Journal of Derivatives 12(3), 63-72.

Verzekerden discrimineren betekent niet noodzakelijk hen benadelen. [PDF version] J. Dhaene & S. Vanduffel (2005). De Tijd, 3 mei 2005.

de Jong, J. R., Vlaeyen, J. W. S., Onghena, P., Goossens, M. E. J. B., Geilen, M., & Mulder, H. (2005). Fear of movement/(re)injury in chronic low back pain: Education or exposure in vivo as mediator to fear reduction? *Clinical Journal of Pain*, 21, 9-17.

Gadeyne, E., Ghesquière, P., & Onghena, P. (2005). The relationship over time between academic performance and behaviour problems in young children. In P. Ghesquière & A. J. J. M. Ruijssemaars (Eds.), *Learning disabilities: A challenge to teaching and instruction* (pp. 91-104). Leuven: Leuven University Press.

Onghena, P. (2005). Case studies. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science: Vol. 1* (pp. 201-204). New York: Wiley.

- Onghena, P. (2005). Compensatory equalization. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science: Vol. 1* (pp. 337-338). New York: Wiley.
- Onghena, P. (2005). Placebo effect. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science: Vol. 3* (pp. 1550-1552). New York: Wiley.
- Onghena, P. (2005). Reactivity. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science: Vol. 4* (pp. 1717-1718). New York: Wiley.
- Onghena, P. (2005). Resentful demoralization. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science: Vol. 4* (pp. 1744-1746). New York: Wiley.
- Onghena, P. (2005). Single-case designs. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science: Vol. 4* (pp. 1850-1854). New York: Wiley.
- Onghena, P., & Edgington, E. S. (2005). Customization of pain treatments: Single-case design and analysis. *Clinical Journal of Pain*, 21, 56-68.
- Onghena, P., & Van den Noortgate, W., (2005). Confounding variable. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science: Vol. 1* (pp. 391-392). New York: Wiley.
- Prinzie, P., & Onghena, P. (2005). Cohort sequential design. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science: Vol. 1* (pp. 319-322). New York: Wiley.
- Prinzie, P., Onghena, P., & Hellinckx, W. (2005). Parent and child personality traits and children's externalizing problem behavior from age 4 to 9 years: A cohort-sequential latent growth curve analysis. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, 51, 335-366.
- Prinzie, P., Onghena, P., Hellinckx, W., Grietens, H., Ghesquière, P., & Colpin, H. (2005). Direct and indirect relationships between parental personality and externalising behaviour: The role of negative parenting. *Psychologica Belgica*, 45, 123-146.
- Van den Noortgate, W., & Onghena, P. (2005). Meta-analysis. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science: Vol. 3* (pp. 1206-1217). New York: Wiley.
- Van den Noortgate, W., & Onghena, P. (2005). Parametric and nonparametric bootstrap methods for meta-analysis. *Behavior Research Methods, Instruments, & Computers*, 37, 11-22.
- Van den Noortgate, W., Opdenakker, M.-C., & Onghena, P. (2005). The effects

of ignoring a level in multilevel analysis. *School Effectiveness and School Improvement*, 16, 281-303.

Van de Vliet, P., Mutrie, N., & Onghena, P. (2005). Alternative research strategies in the exercise – mental health relationship. *Acta Universitatis Palackianae Olomucensis, Gymnica*, 35, 61-67.

Van Ingelghem, M., Boets, B., van Wieringen, A., Onghena, P., Ghesquière, P., Vandenbussche, E., & Wouters, J. (2005). An auditory temporal processing deficit in children with dyslexia? In P. Ghesquière & A. J. J. M. Ruijssemaars (Eds.), *Learning disabilities: A challenge to teaching and instruction* (pp. 47-63). Leuven: Leuven University Press.

Verachtert, P., Verhaeghe, J. P., Onghena, P., Van Petegem, P., & Van Damme, J. (2005). *Beginsituatie en leerresultaten in het eerste leerjaar*. Onderzoek in opdracht van de Vlaamse minister van Onderwijs en Vorming, in het kader van het programma "Steunpunten voor Beleidsrelevant Onderzoek", Steunpunt Loopbanen doorheen Onderwijs naar Arbeidsmarkt, LOA-rapport nummer 38.

Delalieux S., Keulemans W., van Aardt J., Schrevens E. and Coppin P. 2005. Detection of natural and stress-induced variability in reflectance spectra of apple trees using hyperspectral analysis. SPIE Remote Sensing Symposium.

Cooman; E. Schrevens . 2005. A Monte Carlo Approach for Estimating the Uncertainty on Predictions of the Tomgro Model. Biosystems Engineering.

Heylen O, Hermy M and Schrevens E. 2005. Determinants of cryptogamic epiphyte diversity in a river valley (Flanders). Biological Conservation 126 (3): 371-382.

Schrevens E, Coppenole H and Portier K. 2005. A comparative study between latent class binomial segmentation and mixed effects logistic regression to explore between-respondent variability in visual preference for horticultural products. Journal of Applied Statistics.32 (6): 589-605.

Van den Noortgate, W., & De Boeck, P. (2005). Assessing and explaining differential item functioning using logistic mixed models. *Journal of Educational and Behavioral Statistics*, 30, 443-464.

Breidt, J., Claeskens, G. & Opsomer, J. (2005). "Model-assisted estimation for complex surveys using penalized splines". Biometrika, 92, 831-846.

Crainiceanu, C., Ruppert, D., Claeskens, G. & Wand, M.P. (2005). Likelihood ratio tests of polynomial regression against a general nonparametric alternative. Biometrika, 92, 91-103.

M. Jansen and P. Oonincx: Second Generation Wavelets and Applications SpringerVerlag, 2005 (ISBN: 1-85233-916-0)

M. Jansen: Minimum risk thresholds for data with heavy noise, IEEE Signal Processing Letters, 13(5), pages 296-299, May 2006.

M. Jansen: Multiscale Poisson data smoothing, Journal of the Royal Statistical Society, Series B, 68(1), pages 27-48, 2006.

W. Van Aerschot, M. Jansen, and A. Bultheel: Adaptive splitting for stabilizing 1-D wavelet decompositions on irregular grids, Signal Processing, To Appear.

V. Delouille, M. Jansen, and R. von Sachs: Second generation wavelet methods for denoising of irregularly spaced data in two dimensions, Signal Processing, To Appear.

M. Jansen, R. Baraniuk, and S. Lavu: Multiscale Approximation of Piecewise Smooth Two-Dimensional Functions using Normal Triangulated Meshes, Appl. Comp.Harm. Anal., 19(1), pages 92-130, 2005.

Hoegaerts L., Suykens J.A.K., Vandewalle J., De Moor B., ``Subset based least squares subspace regression in RKHS'', *Neurocomputing*, vol. 63, Jan. 2005, pp. 293-323.

Devos A., Simonetti A.W., van der Graaf M., Lukas L., Suykens J.A.K., Vanhamme L., Buydens L.M.C., Heerschap A., Van Huffel S., ``The use of multivariate MR Imaging Intensities versus metabolic data from MR Spectroscopic Imaging for model selection'', *Journal of Magnetic Resonance*, vol. 173, no. 2, Apr. 2005, pp. 218-228.

Pelckmans K., De Brabanter J., Suykens J.A.K., De Moor B., ``The differogram : Nonparametric noise variance estimation and its use for model selection '', *Neurocomputing*, Special Issue on Signal Processing, vol. 69, no. 1-3, Dec. 2005, pp. 100-122.

Pelckmans K., Goethals I., De Brabanter J., Suykens J.A.K., De Moor B., ``Componentwise Least Squares Support Vector Machines'', Chapter in *Support Vector Machines: Theory and Applications*, (Wang L., ed.), Springer, 2005, pp. 77-98.

Pelckmans K., Espinoza M., De Brabanter J., Suykens J.A.K., De Moor B., ``Primal-Dual Monotone Kernel Regression'', *Neural Processing Letters*, vol. 22, no. 2, Oct. 2005, pp. 171-182.

Pelckmans K., De Brabanter J., Suykens J.A.K., De Moor B., ``Maximal Variation and Missing Values for Componentwise Support Vector Machines'', in *Proc. of the International Joint Conference on Neural Networks (IJCNN 2005)*, Montreal, Canada, Aug. 2005, pp. .

Espinoza M., Suykens J., De Moor B., ``Kernel Based Partially Linear Models and Nonlinear Identification", *IEEE Transactions on Automatic Control*, Special Issue on System Identification, vol. 50, no. 10, Oct. 2005, pp. 1602-1606.

Pelckmans K., Suykens J.A.K., De Moor B., ``Building Sparse Representations and Structure Determination on LS-SVM Substrates", *Neurocomputing*, Special Issue, vol. 64, Mar. 2005, pp. 137-159.

Pochet N.L.M.M., Janssens F.A.L., De Smet F., Marchal K., Suykens J.A.K., De Moor B.L.R., ``M@CBETH: a microarray classification benchmarking tool", *Bioinformatics*, vol. 21, no. 14, Jul. 2005, pp. 3185-3186.

Espinoza M., Suykens J.A.K., De Moor B., ``Load Forecasting using Fixed-Size Least Squares Support Vector Machines", in *Computational Intelligence and Bioinspired Systems*, (Cabestany J., Prieto A., and Sandoval F., eds.), Proceedings of the 8th International Work-Conference on Artificial Neural Networks, vol. 3512 of *Lecture Notes in Computer Science*, Springer-Verlag, 2005, pp. 1018-1026.

Alzate C., Suykens J. A. K., ``Extending Kernel Principal Component Analysis to General Underlying Loss Functions", in *Proc. of the International Joint Conference on Neural Networks (IJCNN'05)*, Montreal, Canada, Jul. 2005, pp. 214-219.

Espinoza M., Suykens J.A.K., De Moor B., ``Imposing Symmetry in Least Squares Support Vector Machines Regression", in *Proc. of the 44th IEEE Conference on Decision and Control (CDC)*, Seville, Spain, Dec. 2005, pp. 5716 - 5721.

Pelckmans K., Suykens J.A.K., De Moor B., ``Componentwise Support Vector Machines for Structure Detection", in *Proc. of the International Conference on Artificial Neural Networks (ICANN 2005)*, Warsaw, Poland, Sep. 2005, pp. .

Ameye L., De Brabanter J., Suykens J.A.K., Cadron I., Devlieger R., Timmerman D., Spitz B., Van Huffel S., ``Predictive Models for Long Term Survival after Premature Rupture of Membranes", in *Proc. of the 2005 IEEE Engineering in Medicine and Biology 27th Annual Conference (IEEE-EMB)*, Shanghai, China, Sep. 2005, pp. 572-575.

Pelckmans K., De Brabanter J., Suykens J.A.K., De Moor B., ``Handling Missing Values in Support Vector Machine Classifiers", *Neural Networks*, vol. 18, 2005, pp. 684-692.

Pelckmans K., De Brabanter J. Suykens J.A.K., De Moor B., ``Convex Clustering Shrinkage", in *Workshop on Statistics and Optimization of Clustering Workshop (PASCAL)*, London, U.K., Jul. 2005.

Espinosa M., Suykens J.A.K., De Moor B., "Short Term Chaotic Time Series Prediction using Symmetric LS-SVM Regression", in *Proc. of the 2005 International Symposium on Nonlinear Theory and Applications (NOLTA)*, Bruges, Belgium, Oct. 2005, pp. 606-609.

Van Gorp T., De Smet F., Pochet N., Engelen K., Van Hummelen P., Suykens J., Marchal K., Amant F., Moreau Y., Timmerman D., De Moor B., Vergote I., "Predicting the clinical behavior of ovarian cancer from gene expression profiles", in *International Journal of Gynecological Cancer (14th International meeting of the ESGO) (ESGO 14)*, Istanbul, Turkey, Sep. 2005, pp. 1-2.

Pochet N.L.M.M., Janssens F.A.L., De Smet F., Marchal K., Vergote I.B., Suykens J.A.K., De Moor B.L.R., "M@CBETH: optimizing clinical microarray classification", in *Proc. of the 2005 IEEE Computational Systems Bioinformatics Conference (CSB2005)*, Stanford, California (US), Aug. 2005, pp. 89-90.

De Brabanter J., Pelckmans K., Suykens J.A.K., De Moor B., "Prediction Intervals for NAR Model Structures Using a Bootstrap Method", in *Proc. of the 2005 International Symposium on Nonlinear Theory and its Applications (NOLTA 2005)*, brugge, Belgium, Sep. 2005, 6 p.

Van Gestel T., Baesens B., Van Dijcke P., Suykens J.A.K., Garcia J. Alderweireld T., "Linear and non-linear credit scoring by combining logistic regression and support vector machines", *Journal of Credit Risk*, vol. 1, no. 4, 2005, pp. 31-60.

Estimating people's values Kessels R, Goos P, Vandebroek M, 2005, Scientific Computing World - ENBIS Magazine, no. 84 (Oct.-Nov.), pp. 40 - 41.

Model-robust and model-sensitive designs Goos P, Kobilinsky A, O'Brien T, Vandebroek M, 2005, Computational Statistics & Data Analysis, vol. 49, no. 1 (Apr.), pp. 201 - 216.

Identifying effects under a split-plot design structure Langhans I, Goos P, Vandebroek M, 2005, Journal of Chemometrics, vol. 19, no. 1 (Jan.), pp. 5 - 15.

What UIP tests on extreme samples reveal about the missing variable Sercu P, Vandebroek M, 2005, Journal of International Money and Finance, vol. 24, no. 8 (Dec.), pp. 1237 - 1260.

Innovation in business and industrial statistics Vandebroek M, 2005, Quality and Reliability Engineering International, vol. 21, no. 5 (Aug.), pp. III - IV.

J. Beirlant, T. Hoedemakers, M. Goovaerts, J. Dhaene. On the distribution of discounted loss reserves using generalized linear models (2005). Scandinavian Actuarial Journal, 25-45.

- J. Beirlant, R. Worms and J.P. Raoult. On relative approximation error of the Generalized Pareto approximation for a high quantile. (2005). *Extremes*, 6, 335-360.
- J. Beirlant, G. Dierckx, G. Matthys and A. Guillou. Estimation of the extreme value index and regression on generalized quantile plots (2005). *Bernoulli*, 11, 949-970.
- J. Beirlant, J. Segers and W. Schoutens. Mandelbrot's extremism. *Wilmott Magazine*. March 2005, 97-103
- Bamelis, F., Kemps, B., Mertens, K., Tona, K., De Ketelaere, B., Decuypere, E. and De Baerdemaeker, J. (2005) Non destructive measurements on eggs during incubation. *Avian and poultry biology reviews*, 15(3-4): 150-159.
- Bamelis, F., Kemps, B., Mertens, K., Tona, K., De Ketelaere, B., Decuypere, E. and De Baerdemaeker, J. (2005) An automatic monitoring of the hatching process based on the noise of the hatching chicks. *Poultry Science*, 84: 1101-1107.
- Bruggeman, V., Onagbesan, O., Dumez, L., De Ketelaere, B and Decuypere, E. (2005) Effects of early prenatal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on postnatal reproduction in the laying hen (*Gallus domesticus*). *Domestic Animal Endocrinology*, 141 (4): 349-355.
- De Ketelaere, B., Stulens, J. Lammertyn, J. and De Baerdemaeker, J. (2005) Identification and quantification of sources of biological variance: a methodological approach. *Postharvest biology and technology* 39 (1): 1-9.
- Mertens, K., De Ketelaere, B., Kamers, B., Bamelis, F.R., Kemps, B.J., Verhoelst, E.M., De Baerdemaeker, J.G. and Decuypere E.M. (2005). Dirt Detection in Brown Eggs by Means of Color Computer Vision. *Poultry Science*, 84(10): 1653-1659.
- Berna, A.Z., Buysens, S., Di Natale, C., Grün, I.U., Lammertyn, J., Nicolaï, B.M. 2005. Relating sensory analysis with electronic nose and headspace fingerprint MS for tomato aroma profiling. *Postharvest Biology and Technology* 36/2 143-155.
- Berna, A.Z., Lammertyn, J., Buysens, S., Di Natale, C., Nicolaï, B.M. 2005. Mapping consumer liking of tomatoes with headspace fingerprint mass spectrometry and electronic nose data. *Postharvest Biology and Technology* 38 (2): 115-127.
- Veraverbeke, E.A., Lammertyn, J., Nicolaï, B.M., Irudayaraj, J. 2005. Spectroscopic evaluation of the surface quality of apple. *Journal of Agriculture and Food Chemistry* 4, 1046-1051

Veraverbeke, E.A., Irudayaraj, J., Lammertyn, J. 2005. Fast aroma profiling to detect invert sugar adulteration with zNose™. Journal of the Science of Food and Agriculture 85(2), 243-250.

Alamar, M.C., Moltó, E., Bobelyn, E., Lammertyn, J., Nicolaï B.M. 2005. Calibration transfer between a NIR Diode Array and FT-NIR spectrometers. Information and technology for sustainable fruit and vegetable production. 7th Fruit, nut and vegetable production engineering symposium. 12-15 September 2005. Montpellier. 7p.

Berna, A.Z., Buysens, S., Lammertyn, J. Saevels, S., Di Natale, C., Nicolaï, B.M. 2005. Tomato quality evaluation using electronic nose systems to complement sensory analysis. Eds. Mencarelli, F. and Tonutti, P. Proceedings of the 5th International Postharvest Symposium. *Acta horticulturae* 682, 1021-1028.

Beullens, K., Irudayaraj, J., Kirsanov, D., Legin, A., Nicolaï, B.M., Lammertyn, J. The electronic tongue and FTIR-ATR as fast techniques for taste profiling. In: Marco, S. and Montoliu, I. (Eds.) Proceedings of ISOEN 2005, 11th International Symposium on Olfaction and Electronic Nose, Barcelona 13-15 April 2005. 312-315

De Ketelaere, B., Stulens, J., Lammertyn, J. and De Baerdemaeker, J. 2005. Identification and quantification of sources of biological variance. *Acta Horticulturae* 674, 523-529

Franck, C., Lammertyn, J., and Nicolaï, B. M. 2005. Metabolic profiling using GC-MS to study core breakdown in relationship to biochemical changes during long-term storage of pears. Eds. Mencarelli, F. and Tonutti, P. Proceedings of the 5th International Postharvest Symposium. *Acta horticulturae* 682, 1991-1998.

Hertog, M. L. A. T. M., Lammertyn, J., Desmet, M., Scheerlinck, N., and Nicolaï, B. M. 2005. Incorporating biological variance in postharvest modelling. Mencarelli, F. and Tonutti, P. Proceedings of the 5th International Postharvest Symposium. *Acta horticulturae* 682, 843-850.

Legin, A., Kirsanov, D., Rudnitskaya, A., Beullens, K., Lammertyn, J., Nicolai, B.M., Irudayaraj, J., Vlasov, Y. 2005. Analysis of apples varieties – comparison of ET with different analytical techniques. In: Marco, S. and Montoliu, I. (Eds.) Proceedings of ISOEN 2005, 11th International Symposium on Olfaction and Electronic Nose, Barcelona 13-15 April 2005. 176-177

Nicolaï, B. M., Lammertyn, J., Veraverbeke, E., Hertog, M. L. A. T. M., Jancsók, P., Róth, E., Berna, A., Alamar, M. C., and Verlinden, B. E. 2005. Non-destructive techniques for measuring quality of fruit and vegetables. Mencarelli, F. and Tonutti, P. Proceedings of the 5th International Postharvest Symposium. *Acta horticulturae* 682, 1333-1339.

Nicolaï, B.M., Hertog, M.L.A.T.M., Lammertyn, J., Scheerlinck, N., Veraverbeke, E.A., Verboven, P. and Verlinden, B. 2005. Quality kinetics and modelling. *Acta Horticulturae* 687:23-32

Róth, E., Berna, A.Z., Beullens, K., Franck, C., Lammertyn J., Schenk, A., Nicolaï B.M. 2005. A comparative study of quality attributes of integrated and organically produced apple fruit. In: 7th Fruit, nut and vegetable production engineering symposium: Information and technology for sustainable fruit and vegetable production. Montpellier. 8p.

Scheerlinck, N., Desmet, M., Franck, C., Lammertyn, J., Hertog, M. L. A. T. M., and Nicolaï, B. M. 2005. Modelling variability of quality kinetics during postharvest storage: a generic approach. Eds. Mencarelli, F. and Tonutti, P. Proceedings of the 5th International Postharvest Symposium. *Acta horticulturae* 682, 651-658.

Vermeir S., Verboven P., Atalay, Y.T., Nicolaï B.M., Irudayaraj J., Lammertyn J. 2005. Computational fluid dynamics model for optimal flow injection analysis biosensor design. The 4th IEEE conference on sensors. Irvine, USA, October 31-November 4, 2005. 4p. (CD-ROM paper 132796)

Hertog, M.L.A.T.M, Saevels, S., Lammertyn, J., Nicolaï, B.N. 2005. Modelling the aroma regeneration after long term storage of apple at modified atmospheres. 9th International Controlled Atmosphere Research Conference 2005, Michigan, USA. 2p.

Berna, A.Z., Buysens, S., Lammertyn, J., Di Natale, C., Nicolaï, B.M. 2005. Consumer liking to classify tomato cultivars: a comparison with fast aroma profiling techniques. 6th Pangborn Sensory Science Symposium. 7-11 augustus 2005. Harrogate International Centre, Yorkshire, UK. 1p.

Beullens, K., Irudayaraj, J., Kirsanov, D., Legin, A., Nicolaï, B.M., Lammertyn, J. 2005. The electronic tongue and FTIR-ATR for rapid taste profiling in food. Symposium on Voedselchemie in Vlaanderen V: Trends in de Levensmiddelenanalyse. Ghent, 26 May 2005. p89-90.

Vermeir, S., Nicolaï, B.M., Lammertyn, J. 2005. High throughput enzymatic taste biosensor. 11th PhD Symposium on Applied Biological Sciences, 6 October 2005, Leuven, Belgium. Communications in Applied Biological Sciences 70(2) 289-292.

Beullens, K., Sels, B.F., Schoonheydt, R.A., Nicolaï, B.M., Lammertyn, J. 2005. An optical tongue based on ATR-FTIR spectroscopy to taste tomatoes. 11th PhD Symposium on Applied Biological Sciences, 6 October 2005, Leuven, Belgium. Communications in Applied Biological Sciences 70(2) 61-64.

Róth, E. Berna, A.Z., Beullens, K., Schenk, A., Lammertyn, J., Nicolaï, B.M. 2005. Comparison of taste and aroma of integrated and organic apple fruit. 11th

PhD Symposium on Applied Biological Sciences, 6 October 2005, Leuven, Belgium. Communications in Applied Biological Sciences 70(2) 225-228.

Gijbels, I. (2005). Monotone regression. In Encyclopedia of Statistical Sciences. Second Edition. Editors, Samuel Kotz, Norman L. Johnson, Campbell B. Read, N. Balakrishnan, and Brani Vidakovic. Wiley, New York, pp 4951--4968.

Hens N., Aerts M., Molenberghs G., Thijs H., Verbeke G. (2005), 'Kernel weighted influence measures,' Computational Statistics and Data Analysis, 48, 467-487.

Gelman A., Van Mechelen I., Verbeke G., Heitjan D.F., Meulders M. (2005), 'Multiple imputation for model checking: Completed data plots with missing and latent data,' Biometrics, 61, 74-85.

Jansen I., Hens N., Molenberghs G., Aerts M., Verbeke G., Kenward M. (2006), 'The nature of sensitivity in missing not at random models,' Computational Statistics and Data Analysis, 50, 830-858.

Verbeke G. Molenberghs G.,(2005) 'Longitudinal and incomplete clinical studies (with discussion),' Metron: International Journal of Statistics, 63, 143-176.

Verbeke G., Fieuws S., Lesaffre E., Kato B.S., Foreman M.D., Broos P.L.O., Milisen K. (2006), 'A comparison of procedures to correct for baseline differences in the analysis of continuous longitudinal data: A case study,' Applied Statistics, in press.

Jansen I., Beunckens C., Molenberghs G., Verbeke G., Mallinckrodt C., Carroll R.J. (2006), 'Analyzing incomplete binary longitudinal clinical trial data, Statistical

Fieuws S., Verbeke G., 'Pairwise fitting of mixed models for the joint modelling of multivariate longitudinal profiles,' Biometrics, in press.

Tuerlinckx F., Rijmen F., Verbeke G.}, De Boeck, P. (2005), 'Statistical inference in generalised linear mixed models: A review,' British Journal of Mathematical and Statistical Psychology, in press.

Tibaldi F., Verbeke G., Molenberghs G., Renard D., Van den Noortgate W., De Boeck P.(2006) 'Conditional Mixed Models with Crossed Random-Effects,' British Journal of Mathematical and Statistical Psychology, in press.

Kesteloot H., Verbeke G. (2005), 'On the relationship between all-cause, cardiovascular, cancer and residual mortality rates with age,' European Journal of Cardiovascular Prevention & Rehabilitation, in press.

Van Nieuwenhuyse A., Somville P.R., Crombez G., BurdorfA., Verbeke G., Johannik K., Van den Bergh O., Masschelein R., Mairiaux Ph., Moens G.F., the BelCoBack Study Group (2006), 'The role of physical workload and pain-related fear in the development of low back pain in young workers. Evidence from the BelCoBack Study: Results after one year of follow-up,' Occupational and Environmental Medicine, 63, 45-52.

Molenberghs G. en Verbeke, G. (2005) 'Models for discrete longitudinal data,' Springer Series in Statistics, Springer-Verlag, New-York, 683 pages, ISBN 0-387-25144-8.

## **Institut de Statistique**

### **Universite catholique de Louvain**

#### **Published papers - 2005**

RP254 - DARAIO, C. and L. SIMAR (2005) Introducing environmental variables in nonparametric frontier models : a probabilistic approach - journal of Productivity Analysis, 24, 93-121, 2005.

RP253 - GOVAERTS, B. and J. NOEL (2005) Analysing the results of a designed experiment when the response is a curve: methodology and application in metal injection moulding - Qual. Reliab. Engng. Int., 21, 509-520, 2005.

RP252 - MOUCHART, M. and J. ROMBOUTS (2005) Clustered panel data models : an efficient approach for nowcasting from poor data - International Journal of Forecasting, 21, 577-594, 2005.

RP251 - LAMBERT, Ph. and P.H.C. EILERS (2005) Bayesian proportional hazards model with time-varying regression coefficients : a penalized Poisson regression approach - Statistics in Medecine, 24, 3977-3989, 2005.

RP250 - VANDENHENDE, F. and Ph. LAMBERT (2005) Local dependence estimation using semiparametric Archimedian copulas - The Canadian Journal of Statistics, 33,3, 377-388, 2005.

RP249 - DE MACQ, I. and L. SIMAR (2005) Hyper-rectangular space partitioning trees : a practical approach - Computational Statistics, 20, 119-135, 2005.

RP248 - DAOUIA, A. and L. SIMAR (2005) Robust nonparametric estimators of monotone boundaries - Journal of Multivariate Analysis, 96, 311-331, 2005.

RP247 - SANCHEZ-SELLERO, C., GONZALEZ-MANTEIGA, W. and I. VAN KEILEGOM (2005) Uniform representation of product-limit integrals with applications - The Scandinavian Journal of Statistics, 32, 563-581, 2005.

RP246 - DELOUILLE, V., SIMOENS, J. and R. von SACHS (2005) Smooth design-adapted wavelets for nonparametric stochastic regression - Journal of the American Statistical Association, 99, 467, 643-658, 2004.

RP245 - OMBAO, H., von SACHS, R. and W. GUO (2005) SLEX analysis of multivariate nonstationary time series - Journal of the American Statistical Association, 100, 470, 519-531, 2005.

- RP244 - DELOUILLE, V. and R. von SACHS (2005) Estimation of nonlinear autoregressive models using design-adapted wavelets - Annals of the Institute of Statistical Mathematics, 57, 2, 235-253, 2005.
- RP243 - GUO, W., DAI, M., OMBAO, H.C. and R. von SACHS (2005) Smoothing spline ANOVA for time-dependent spectral analysis - Journal of the American Statistical Association, 98, 463, 643-652, 2003.
- RP242 - BROUHNS, N., DENUIT, M. and I. VAN KEILEGOM (2005) Bootstrapping the Poisson log-bilinear model for mortality forecasting - Scandinavian Actuarial Journal, 3, 212-224, 2005.
- RP241 - HALL, P. and I. VAN KEILEGOM (2005) Testing for monotone increasing hazard rate - The Annals of Statistics, 33, 3, 1109-1137, 2005.
- RP240 - MESFIOUI, M. and A. TAJAR (2005) On the properties of some nonparametric concordance measures in the discrete case - Nonparametric Statistics, 17, 5, 541-554, 2005.
- RP239 - DAUBIOUL, C.A., HORSMANS, Y., LAMBERT, Ph., DANSE, E. and N.M. DELZENNE (2005) Effects of oligofructose on glucose and lipid metabolism in patients with nonalcoholic steatohepatitis: results of a pilot study - European Journal of Clinical Nutrition, 59, 723-726, 2005.
- RP238 - MOUCHART, M. and E. SCHEIJING (2005) Bayesian evaluation of a Non-Admissible Conditioning: The Case of Fisher Test - Journal of Econometrics, 123, 283-306, 2005.
- RP237 - GOVAERTS, B., BECK, B., LECOUTRE, E., LE BAILLY, C. and P. VANDEN EECKAUT (2005) From monitoring data to regional distributions : a practical methodology applied to water risk assessment. - Environmetrics, 16, 109-127, 2005.
- RP235 - DENUIT, M. and Ph. LAMBERT (2005) Constraints on concordance measures in bivariate discrete data - Journal of Multivariate Analysis, 93, 40-57, 2005.
- RP234 - GUYOT-DECLERCK, C., FRANCOIS, N., RITTER, C., GOVAERTS, B. and S. COLLIN (2005) Influence of pH and ageing on beer organoleptic properties. A sensory analysis based on AEDA data - Food Quality and Preference, 16, 157-162, 2005.

### **Discussion papers - 2005**

- DP0538 - DAOUIA, A., FLORENS, J.-P. and L. SIMAR (2005) Functional convergence of quantile-type frontiers with application to parametric approximations

- DP0537- FLORENS, J.-P., JOHANNES, J. and S. VAN BELLEGEM (2005) Instrumental regression in partially linear models
- DP0536 - HALL, P. and I. VAN KEILEGOM (2005) Nonparametric "regression" when errors are centred at endpoints
- DP0535 - GEENENS, G. and L. SIMAR (2005) Index coefficients estimation in single-index models: the generalized maximum rank correlation estimator
- DP0534 - JULLION, A. and Ph. LAMBERT (2005) Robust specification of the roughness penalty prior distribution in spatially adaptive Bayesian P-splines models
- DP0533 - TEODORESCU, B., VAN KEILEGOM, I. and R. CAO (2005) Generalized time-dependent conditional linear models under left truncation and right censoring
- DP0532 - GOVAERTS, B. and C. LE BAILLY de TILLEGHEM (2005) Uncertainty propagation in multiresponse optimization using a desirability index
- DP0531 - GOVAERTS, B. and C. LE BAILLY de TILLEGHEM (2005) Distribution of desirability index in multicriteria optimization using desirability functions based on the cumulative distribution function of the standard normal
- DP0530 - HEUCHENNE, C. (2005) Strong uniform consistency results of the weighted average of conditional artificial data points
- DP0529 - COURTOIS, C., DENUIT, M. and S. VAN BELLEGEM (2005) Discrete s-convex extremal distributions: Theroy and applications
- DP0528 - GAO, J., GIJBELS, I. and S. VAN BELLEGEM (2005) Nonparametric simultaneous testing for structural breaks
- DP0527 - LAMBERT, Ph. (2005) Archimedean copula estimation using Bayesian splines smoothing techniques
- DP0526 - DETTE, H. and I. VAN KEILEGOM (2005) A new test for the parametric form of the variance function in nonparametric regression
- DP0525 - HENDERSON, D.J. and L. SIMAR (2005) A fully nonparametric stochastic frontier model for panel data
- DP0524 - SIMAR, L. and P.W. WILSON (2005) Estimation and inference in cross-sectional, stochastic frontier models
- DP0523 - ZELENYUK, V. (2005) Distributional testing in solow's growth accounting model: with application to studying impact of ICT in developed countries
- DP0522 - ZELENYUK, V. (2005) Power of significance test of dummies in Simar-Wilson two-stage efficiency analysis model

- DP0521 - EL GHOUCH, A., VAN KEILEGOM, I. and I. W. McKEAGUE (2005) Empirical likelihood confidence intervals for dependent duration data
- DP0520 - HEUCHENNE, C. and I. VAN KEILEGOM (2005) Mean preservation in nonparametric regression with censored data
- DP0519 - PARDO-FERNANDEZ, J.C., VAN KEILEGOM, I. and W. GONZALEZ-MANTEIGA (2005) Goodness-of-fit tests for parametric models in censored regression
- DP0518 - HEUCHENNE, C. and I. VAN KEILEGOM (2005) Estimation in nonparametric location-scale regression models with censored data
- DP0517 - SALNYKOV, M. and V. ZELENYUK (2005) On comensurability of directional distance functions
- DP0516 - COSMA, A., SCAILLET, O. and R. von SACHS (2005) Multivariate wavelet-based shape preserving estimation for dependent observations
- DP0515 - HALL, P. and I. VAN KEILEGOM (2005) Two-sample tests in functional data analysis starting from discrete data
- DP0514 - ALMEIDA, C. and M. MOUCHART (2005) Bayesian encompassing test under partial observability
- DP0513 - BUGLI, C., LAMBERT, Ph. and J. BIGOT (2005) Curve registration using fractional polynomials with application to electroencephalograms analysis
- DP0512 - HEUCHENNE, C. and I. VAN KEILEGOM (2005) Nonlinear regression with censored data
- DP0511 - SAN MARTIN, E., MOUCHART, M. and J.-M. ROLIN (2005) Ignorable Common Information, Null Sets and Basu's First Theorem
- DP0510 - PARDO-FERNANDEZ, J. C. and I. VAN KEILEGOM (2005) Comparison of regression curves with censored responses
- DP0509 - BADUNENKO, O., HENDERSON, D. J. and V. ZELENYUK (2005) Technological change and transition: relative contributions to worldwide growth during the 1990's
- DP0508 - GEENENS, G. and M. DELECROIX (2005) A survey about single-index models theory
- DP0507 - VAN BELLEGEM, S. and R. DAHLHAUS (2005) Semiparametric estimation by model selection for locally stationary processes
- DP0506 - PATILEA, V. and J.-M. ROLIN (2005) Product-limit estimators of the survival function with left or right censored data

DP0505 - ZELENYUK, V. (2005) Aggregation of Malmquist Productivity Indexes  
DP0504 - GOVAERTS, B. and J. NOEL (2005) Analysing the results of a designed experiment when the response is a curve: methodology and application in metal injection moulding

DP0503 - VAN KEILEGOM, I. and R. J. CARROLL (2005) Backfitting versus profiling in general criterion functions

DP0502 - DARAIO, C. and L. SIMAR (2005) Conditional nonparametric frontier models for convex and non convex technologies: a unifying approach

DP0501 - JEONG, S.-O. and L. SIMAR (2005) Linearly interpolated FDH efficiency score for nonconvex frontiers







### **Next issue**

We would like to publish in this *Newsletter* any statistical matter such as :

- information about universities, institutes (1 to 3 pages);
- lists of recent publications and technical reports;
- abstracts of recent PhD theses;
- news of members;
- forthcoming statistical events and announcements;
- short papers about teaching methods in statistics, statistics in the industry, official statistics, etc.

Suggestions are welcome: please, contact us.

Suitable information for the next issue, prepared as **(LA)TEX or WORD FILES**, should reach the editors of the Newsletter **BEFORE August 15, 2006**, preferable by e-mail to:

sophie.vanbelle@ulg.ac.be  
olivier.thas@ugent.be

### **Any change of job, address, phone number, ... ?**

Please notify the Secretary of the Society:

Gentiane Haesbroeck:  
Université de Liège  
Institut de mathématique  
Sart Tilman B37  
B-4000 Liège  
g.haesbroeck@ulg.ac.be

