

B-Stat News

The Newsletter
of the
Belgian Statistical Society
Belgische Vereniging voor Statistiek
Soci t  Belge de Statistique

Number 41 – September 2007

Editeurs responsables/Verantwoordelijke uitgevers :
Olivier Thas, Universiteit Gent
Coupure Links 653, 9000 Gent
Sophie Vanbelle, Service de Biostatistique, Universit  de Li ge
CHU Sart Tilman, 4000 Li ge

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

Dr. Guy Brys, INS-NIS

Dr. Filip De Ridder, Janssen Pharmaceutica

Pr. Peter Goos, Univeriteit Antwerpen

Pr. Marc Hallin, Université Libre de Bruxelles

Pr. Philippe Lambert, Université de Liège

Pr. Jean-Paul Rasson, Facultés univ. ND de la Paix, Namur

Pr. Christian Ritter, Université Catholique de Louvain

Pr. Martina Vandebroek, Katholiek Universiteit Leuven

Pr. Ingrid Van Keilegom, Université Catholique de Louvain

Pr. Kristel Van Steen, Univeriteit Gent

Website of the Society

www.sbs-bvs.be

Webmaster

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

TABLE OF CONTENTS

Directorate-General Statistics Belgium.....	3
Member list of the HRS-CSS	6
15 th SBS-BVS Annual meeting (BSS 2007).....	10
Young European statisticians workshop (YES-I).....	17
Graduate course on machine translation.....	18
Continuing education courses on statistics.....	20
Short course: a short introduction to discrete choice models.....	22
10 th European symposium on statistical methods for the food industry.....	23
Forthcoming statistical events	24
Long term visitors.....	28
News from our members.....	30
Recent Ph.D. theses	31
Game	33

DIRECTORATE-GENERAL STATISTICS BELGIUM

Formerly known as NIS-INS, Directorate-General Statistics Belgium is part of the Federal Public Service Economy. Our mission is to deliver timely, reliable and relevant figures to international, European and Belgian authorities, to Belgian and foreign enterprises, to education, research and development and finally to civil society. Statistics Belgium collects data and statistics, transforms them into statistics and statistical products and disseminates the statistics, statistical products and the explanations.

Hereby we would like to present some of the surveys carried out by Statistics Belgium. The selected surveys are collected in households and regulated by the European Commission (EUROSTAT), with exception of the GGPS which is regulated by UNECE. This general framework gives the opportunity to compare results among different member states. Mostly, the national statistical institutes are responsible for selecting the sample, preparing the questionnaires, conducting the direct interviews among households, and forwarding the results to EUROSTAT in accordance with the common coding scheme. Further information on those surveys and other surveys can be found on the website <http://www.statbel.fgov.be/>.

SILC

The European Union Statistics on Income and Living Conditions is an instrument aiming at collecting timely and comparable cross-sectional and longitudinal multidimensional microdata on income, poverty, social exclusion and living conditions. The instrument aims to provide two types of data: Cross-sectional data pertaining to a given time or a certain time period with variables on income, poverty, social exclusion and other living conditions; Longitudinal data pertaining to individual-level changes over time, observed periodically over, typically, a four year period.

Social exclusion and housing condition information is collected at household level while labour, education and health information is obtained for persons aged 16 and over. The core of the instrument, income at very detailed component level, is mainly collected at personal level but a few components are included in the household part of SILC.

LFS

The European Union Labour Force Survey is a large household sample survey providing quarterly results on labour participation of people aged 15 and over as well as on persons outside the labour force. Some of the questions are the occupation and industry details of main and second job, the hours worked, the length of time in main job or the length of unemployment, the methods used to look for work, the type of employment sought, the participation to education, the highest level of completed education and so on. Main indicators resulting from the survey are the employment, the activity and the unemployment rate (by sex, age group, level of education,...). In all of the countries providing quarterly data the quarterly sample is spread uniformly over all weeks of the quarter.

HBS

The Household Budget Survey produces annual data on the expenditure structure and incomes of the average household at the national and the regional level. The Household Budget Survey produces information about the consumption expenditure of households for consumables, investments goods, energy, services, savings and debt. The survey gives also information about characteristics of the household as activity, age, education level, etc.

The possession of durable consumer goods, living conditions, rental value of the occupied accommodation, charges paid in relation to housing, periodic payments,...are collected data of households by interviews or diaries.

ISS

The Information Society Statistics aims at collecting harmonised and comparable information on the Europeans citizens' access to and use of computers and the Internet. Data are collected on the available ICT devices as well as the frequency and location of computer and Internet use. Users are asked for the purpose and nature of their activities (including e-shopping) while non-users are asked to report their main barriers to the e-society.

The scope of the survey was broadened over the years by introducing questions on ICT skills and security related issues. To make detailed and policy-relevant analysis of the data collected possible, information is also collected on the socio-economic background of the respondents. The

statistics produced are broken down by age groups, gender, education and employment situation.

GGPS

The Generations and Gender Panel Study proposed by UNECE (PAU) is a periodical survey concerning relationships between partners (marital, cohabitant,...) and between generations (parent-child, child-parent, fertility, care of previous and future generations). Moreover, information is gathered about the economical and social consequences of hazing (denatality) and population senescence, as well as about the impact of demographic developments on the labour market status and the pension climate. Finally, data are collected concerning the impact of the social, economical and political environment on demographic developments and the intentions of the population.

The GGPS consists of three waves. This three-wave approach makes it possible to follow, over a period of time, the intentions of the persons interviewed and the acting out, in the event, of these intentions, as well as the interfering and stimulating factors to realise those intentions. The interviews are face-to-face and conducted in all Belgian regions. In the first wave which will take place in 2007, we aim to have 10.000 respondents aged 18 to 79. The second and third wave will follow in 2010 and 2013. In each wave, the standard international questionnaire will be translated and adjusted to the Belgian situation.

Guy Brys
Directorate-General Statistics Belgium

**HOGE RAAD VOOR DE STATISTIEK
CONSEIL SUPERIEUR DE STATISTIQUE**

MEMBERS

ACX Rudi

Directeur
NBB

BEVERS Tom

Attaché
FOD Werkgelegenheid, Arbeid en Sociaal Overleg

BILLIET Jaak

Professor
KUL

BOURDEAUD'HUI Ria

Adviseur
Vlaamse Gemeenschap

Madame la Vice-Présidente BRUYNINCKX Marielle

Professeur
Université de Mons-Hainaut

BUNTINX Nadine

Adjunct-secretaries
AD SEI

DEFAYS Daniel

Administrateur général
Région wallonne

DEHON Catherine

Professeur
ULB

DEKELPER Irene

Verantwoordelijk
Centrale générale des Syndicats libéraux de Belgique

DEMEESTER Niko

Directeur-generaal
AD SEI

DESCHAMPS Luc

Adviseur
Vlaamse Gemeenschap

DESPONTIN Marc

Professor
VUB

DMITREVSKY Pierre

Conseiller
ONSS

DONNAY Philippe

Conseiller
VBO – FEB

DOUTREPONT Emmanuel

Adviseur
FEVIA

DUBOIS Olivier

Conseiller
Union des villes et Communes belges

DUCHATEAU Luc

Professor
Universiteit Gent

HAEGEMAN Peter

Conseiller
FEDIS

HARDY Andre

Professeur
Université Notre-Dame de la Paix à Namur

HERMESSE Olivier

Collaborateur Service d'études
Confédération des Syndicats chrétiens

HERTVELDT Bart

Adviseur
Federaal Planbureau

HUYGHE François

Adviseur
Boerenbond

LEROY Jan

Stafmedewerker
Vereniging van Steden en Gemeenten van België

LIEBAERT Jean-Pierre
Directeur
Confédération nationale de la construction

MAGDALENIC Igor
Conseiller
ESSENSCIA

MASUY-STROOBANT Godelieve
Professeur
UCL

MAUROY Philippe
Secrétaire
DG SIE

PERELMAN Sergio
Professeur
ULG

PFEIFFER Bjoern
Conseiller
Duitstalige gemeenschap

PLASMAN Olivier
Conseiller
Communauté française de Belgique

ROBBEN Frank
Administrateur général
KSZ

ROLLIER Raf
Directieattaché
FEBELFIN

ROMAIN Astrid
Conseiller
Région bruxelloise

ROUMA Christiane
Adviseur generaal
SPF Intérieur

ROUSSEAU Sabine
Adviseur
Région bruxelloise

SCREURS Jeannine

Adviseur
AGORIA

THYS Rita

Adviseur
ASSURALIA

VANDENBOSCH Karel

Professor
Universiteit Antwerpen

VANDERKELEN Françoise

Coordinatrice scientifique
Région wallonne

VAN DONINCK Bogdan

Eerste Opmachthoudster
POD Wetenschapbeleid

VAN LAERE Christian

Eerste attaché
FOD Financiën

VANPEBORGH Gitta

Directeur
ABVV

Mevrouw de Voorzitter VAN WOUWE Martine

Professor
Universiteit Antwerpen

VERAVERBEKE Noel

Professor
Limburgs Universitair Centrum

VERGEYNST Thierry

Statistisch Expert
Vlaamse Gemeenschap

WEISERBS Daniel

Professeur
UCL

WILQUET Edouard

Conseiller
DG SIE

15TH ANNUAL MEETING OF THE BELGIAN STATISTICAL SOCIETY SBS-BVS

October (18), 19 and 20, 2007, Antwerpen

A tentative program of the next meeting of the Belgian Statistical Society (BSS 2007) is now available on the conference web-site:

<http://www.ua.ac.be/main.aspx?c=.BSS2007&n=51352>

Thursday 18th October 2007 (Young Statistician Day)

10h00 Registration and Welcome

10h30 *What makes a good presentation?*

Mr. Frank Van Splunder, staff member of Linguapolis and of the Faculty of Political and Social Sciences (UA)

12h00 Lunch

13h30 Presentations by PhD students

- Gaelle Boulet (UA), *HPV16 integration status as a biomarker for CIN2+ lesions*
- Jozefien Buyze (UG), *Designing a sequentially randomised study with adherence enhancing interventions for diabetes patients*
- Fabrizio Consentino (KUL), *Model Selection with Missing Covariates under Ignorable Missingness*
- Jeroen Huyghe (UA), *Looking for rare variants implicated in complex disease in genome-wide association studie*
- Jean-Marie Kalau Mutej (ULB), *Sampling in populations not easily reachable for the investigations in the Democratic Republic of Congo*
- Muhamad Safiih Lola (University of Malaysia), *Fuzzy Modelling Approach To Sample Selection Models*

- Frederik Michiels (UA), *Tackling the copula test space problem*
- Stephan Van der Veecken (KUL), *Outlier detection for skewed data*
- Sophie Vanbelle (ULg), *A note on the linearly weighted kappa coefficient for ordinal scales*
- Thomas Verdebout (ULB), *Pseudo-Gaussian tests for the Common Principal Components model*

- 15h30 Coffee Break
- 16h00 Quiz about posters and presentations
- 17h00 Time to relax
- 19h30 Dinner in the city

Friday 19th October 2007

- 09h00 Registration and welcome
- 09h45 Opening of the conference
- 10h00 Invited speaker: Shirley Coleman (University of Newcastle)
Six Sigma: an opportunity for statistics and statisticians
- 10h50 Parallel sessions

Biostatistics:

- Lizzy De Lobel (UG), *Alternative methods to detect gene-gene interactions*
- N. Lefèvre (IDDI), *Statistical Alerts For Errors (SAFE): Batteries of automated statistical checks on clinical data*
- Michèle Ampe (KUL), *Analysis of array CGH data for the detection of single-cell chromosomal imbalances*

- Joris Menten (Instituut voor Tropische Geneeskunde) *Bayesian latent class models with conditionally dependent diagnostic tests: a case study*
- Roula Tsonaka (KUL), *Marginalized Semi-Parametric Shared Parameter Models for Incomplete Ordinal Responses*

Methodology

- Giovanni Motta (UCL), *Locally Stationary Factor Models: Identification and Nonparametric Estimation*
- Heidi Arnouts (UA), *Efficient experimental designs in the presence of more than one hard-to-change variable*
- E. Roelant (UG), *Multivariate Generalized S-estimators*
- Etienne Cuvelier (FUNDP), *Modeling Stochastic Process Using Quasi-Arithmetic Means, A Functional Data Analysis Approach*
- Arnout Van Messem (VUB), *The Bouligand influence function and its application for support vector machines*

12h30 Lunch

14h00 Invited speaker: Carlotta Sacerdote (Centro di Riferimento per l'Epidemiologia e la Prevenzione Oncologica in Piemonte) *Mendelian randomization: the use of genetic factors to study causality in epidemiology*

14h50 Parallel sessions

Quetelet Society

- Kasim (UHasselt), *A Latent Response Approach to Multi-Compounds Screening and Baseline Gene Expression Profiles*
- Dimitris Rizopoulos (KUL), *A Two-Part Joint Model for the Analysis of Survival and Longitudinal Binary Data with excess Zeros*

- Dirk Valkenborg (UHasselt), *Correcting the bias induced by 16O/18O labeled peptides in a mass spectrometry setting*

Three Country Corner Local Group of the Royal Statistical Society

- R. De Blander (KUL), *Iterative Estimation Correcting for Error Autocorrelation in Short Panels*
- B. De Boeck (UG), *Reweighted Smooth Tests of Goodness of Fit*
- Jie Yu (KUL), *Efficient Conjoint Choice Designs in the Presence of Respondent Heterogeneity*

15h50 Coffee Break

16h20 Parallel sessions

Quetelet Society

- Auguste Gaddah (UHasselt), *Weak Convergence of the Conditional Koziol-Green Estimator under Dependent Censoring*
- Pierre Squifflet (IDDI), *Impact of data errors on the outcome of randomized clinical trials*

Methodology

- Nezar Bennala (ULB), *Optimal Pseudo-Gaussian Tests For Serial Correlation and Random Individual Effects in Panel Data*
- David Magis (ULg), *Quick data set generation and exact p-value computation in goodness-of-fit testing*

17h00 Invited speaker: Stefaan Walgrave (Universiteit Antwerpen) *Protest surveying. Testing the feasibility and reliability of an innovative methodological approach to political protest*

17h50 Time to relax

19h00 Poster walk and drink

- Jozefien Buyze (UG), *Designing a sequentially randomised study with adherence enhancing interventions for diabetes patients*
- Julie Francart (UCL), *Evaluation of multivariate prognostic models: an application of Cox regression to EORTC malignant mesothelioma trials*
- Guy Brys (Directorate-General Statistics Belgium), *Information Society Statistics*
- Evelien Vaes (UCL), *Decision analytical models to define the cost-effectiveness of ovarian cancer detection techniques*
- Dean Barron (California State University), *Perspective ratios for comparison of multiple two sample Kolmogoroff-Smirnoff and related test statistics*
- Gaelle Boulet (UA), *HPV16 integration status as a biomarker for CIN2+ lesions*
- Stephan Van der Veken (KUL), *Outlier detection for skewed data*
- Lieven Desmet (KUL), *Estimation of curves with jumps or peaks using local linear fit*

20h00 Conference Dinner

Staurday 20th October 2007

09h00 Invited speaker: Léopold Simar (Université Catholique de Louvain) *Stochastic versions of FDH/DEA envelopment estimators*

09h50 Parallel sessions

Biostatistics

- Joke Bilcke (UA), *Statistical issues in cost-effectiveness analysis*
- Sophie Vanbelle (ULg), *Agreement between an isolated rater and a group of raters*
- Stijn Vansteelandt (UG), *Semiparametric inference for statistical interactions*

Statistics in behavioural research

- Wilfried Cools (KUL), *Design efficiency in estimation and statistical testing of multilevel variance parameters: A simulation study*
- Bart Vermeulen (KUL), *Rank-order conjoint experiments: efficiency and optimal designs*
- Annouschka Laenen (UHasselt), *A Family of Measures to Evaluate Scale Reliability in a Longitudinal Setting*

10h50 Coffee Break

11h20 Parallel sessions

Biostatistics

- Ralf-Dieter Hilgers (RWTH Aachen), *Optimal designs for different contrasts of the treatment effect for two-channel microarray experiments*
- Melchior Basanze (Kigali Institute of Science and Technology), *Dilution Linear Calibration Estimators and Small Disturbance Asymptotic Optimality*

Methodology

- Tatyana Krivobokova (KUL), *Fast adaptive penalized splines*
- Oleksandra Daskovska (UCL), *Dynamical analysis of Malmquist productivity index*

- 12h00 Invited speaker: Rosemary A. Bailey (Queen Mary University of London) *Design of dose-escalation trials*
- 12h50 Conference adjourn
- 13h00 Lunch
- 14h30 Satellite workshop: *The analysis of longitudinal data, subject to missingness*
Geert Molenberghs, Universiteit Hasselt & Geert Verbeke, Katholieke Universiteit Leuven

YOUNG EUROPEAN STATISTICIANS WORKSHOP (YES-I)

8-10 October 2007, Eindhoven, The Netherlands

At Eurandom (Eindhoven, The Netherlands), a workshop will be held on "*Shape Restricted Inference*", especially aimed at young researchers in statistics. The event will take place on October 8, 9 and 10, 2007.

Three well known researchers in the field (Lutz Duembgen, Guenther Walther and Jon A. Wellner) will give presentations focusing on asymptotics, algorithms and testing respectively. Moreover, young statisticians are encouraged to give a presentation themselves for the audience consisting of other young statisticians and senior researchers. There is no registration fee.

More information on the workshop can be found at

http://www.eurandom.tue.nl/workshops/2007/YES_1/YES_1_main.htm

If you are planning to come, please register via that page.

If you have students for whom this workshop might be interesting, please send this announcement to them.

We hope to be able to welcome many young statisticians at this workshop.

On behalf of the organizers of the workshop,

Lucienne Coolen
Workshop officer
LG 1.13
PO Box 513 - 5600 MB Eindhoven
The Netherlands
tel +31 40 247 8122
fax +31 40 247 8190
www.eurandom.tue.nl

GRADUATE COURSE: MACHINE TRANSLATION – FINITE-STATE MODELS AND STATISTICAL APPROACHES

8-10 October 2007, UCL, Louvain-la-Neuve

The graduate course: “*Machine Translation - finite-state models and statistical approaches*” will be given by the Prof. Enrique Vidal, Universidad Politecnica de Valencia, Spain (<http://web.iti.upv.es/~evidal/>).

Machine translation is known as one of the hardest tasks in artificial intelligence. The initial hopes, dating back to the sixties and seventies, to build an automatic translation system were dashed. In the last decade however, spectacular improvements were observed. While machine translation is still an open research problem, practical software exists providing accurate translations in well defined domains or translation assistance for professionals. These successes are mostly due to two factors: the dramatic increase of available computing resources (CPU, disk and memory) and the development of well founded and highly effective pattern recognition and statistical learning methods. Machine translation is thus a very good example of the success of machine learning techniques over rule-based systems. This course presents the basics in machine translation as well as latest advances with a strong emphasis on example-based learning techniques and statistical methods. Here the examples form parallel corpora typically consisting of sentences in a source language and their corresponding translation in a target language. Additional information such as dictionaries and/or partial alignments between the sentences can also be used. The various topics of the course will be covered according to the following schedule.

October 8, 2007 (10.00-12.00 and 14.00-16.00)

- Definitions and approximations to the machine translation problem
- Statistical framework of machine translation
- Software environments for processing parallel corpora

October 9, 2007 (10.00-12.00 and 14.00-16.00)

- Statistical alignment models
- Statistical finite-state transducers

October 10, 2007 (10.00-12.00 and 14.00-16.00)

- Speech-to-speech translation techniques
- Computer-assisted translation systems

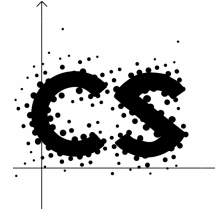
Registration to the course is free but mandatory. Please fill in the online registration form here:

<http://www.uclouvain.be/doctoralschool-cil/index.php?page=agenda>

The course will be given on October 8, 9 and 10 from 10 am to 4 pm in the seminar room (3rd floor) of the Reaumur building. Detailed access information can be found here:

<http://www.info.ucl.ac.be/Bienvenue/adresse.php>

Any additional request concerning this course may be addressed to Pierre.Dupont@uclouvain.be



CONTINUING EDUCATION COURSES ON STATISTICS

To meet the needs of users of statistical methods, the Center for Statistics of Ghent University, in co-operation with the Institute for Continuing Education in Science (ICES), organises a series of courses on statistics each year. Our goal is to provide insight in the basics of statistical research. Practical sessions on PC allow participants to obtain this through hands-on experience. Our courses are aimed at professionals and students with an academic training, who wish to refresh their knowledge, keep it up to date or discover new areas of research. The program is designed to offer very specific knowledge and skills through separate modules.

The 2007-2008 program consists of the following 8 modules:

M1: Introduction to SPSS	(4 evenings, October 2007)
M2: Introduction to SAS	(4 evenings, October 2007)
M3: Introductory Statistics. Basics of Statistical Inference	(7 evenings, Nov.-Dec. 2007)
M4: Survival Analysis	(3 evenings, November 2007)
M5: Analysis of Variance	(7 evenings, Jan.-Feb. 2008)
M6: Missing Data	(3 days, January 2008)
M7: Linear Regression	(6 afternoons, Feb.-Mar. 2008)
M8: Data Mining	(3 days, March 2008)

Please watch our website www.ipvw-ices.Gent.be for other short courses on specialised topics that will be announced during the course of the year.

Students and personnel employed in the government, the non-profit and social-profit sector can participate at a considerably reduced registration fee. The Flemish Community regards continuing training as an important aspect

in its economic policy. Again this year professionals are granted financial support through the government's introduction of training cheques. More information about this stimulating initiative can be found on the ICES-website, and on the website of the Flemish Community, www.opleidingscheques.be, and the VDAB, www.vdab.be/opleidingscheques.

In addition, several of the modules can lead to obtaining a certificate of Ghent University upon succeeding in the exam. These modules can therefore be incorporated as a course in a Ph.D. training.

Detailed information about these and other courses is available at our website. If you would like to be kept informed personally please send us your co-ordinates through use of the online web form 'Stay informed'.

Ghent University – ICES,
Krijgslaan 281 S3, 9000 Ghent, Belgium
Tel. +32 (0)9 264 44 26
Fax +32 (0)9 264 85 90
E-mail: Isabel.DeZutter@UGent.be
www.ipvw-ices.UGent.be

SHORT COURSE: A SHORT INTRODUCTION TO DISCRETE CHOICE MODELS

19-20 December 2007, Antwerpen, Belgium

Michel Bierlaire (Ecole Polytechnique Fédérale de Lausanne) will give a short course at the City Campus of the University of Antwerp introducing discrete choice models. The series of lectures covers the theoretical foundations and the basic principles of discrete choice. The focus is on the design of operational models. Covered topics include: data collection, modeling assumptions, model specification, model estimation, testing and application. Several examples of applications in various fields, including marketing, transportation and energy, will be used to illustrate the concepts. The course consists of 4 sessions of 90 minutes each day.

More information will soon be posted at <http://www.ua.ac.be/statua>

10TH EUROPEAN SYMPOSIUM ON STATISTICAL METHODS FOR THE FOOD INDUSTRY

(22) 23-25 January 2008, Louvain-la-Neuve, Belgium

The 10th edition of the European Symposium on Statistical Methods for the Food Industry will take place at Louvain-la-Neuve, Belgium, from January 23 to January 25, 2008. These days offer an ideal opportunity to statisticians, engineers, and users of statistical methods in food industries to meet and exchange experiences around stimulating themes like sensometrics, chemometrics, risk analysis and process control.

This event is an initiative of the Agro-Industry group of the French Statistical Society (<http://www.sfds.asso.fr/>). It is organized in 2008 by the Institute of Statistics of the Université catholique de Louvain (UCL), with the collaboration of the Faculté d'ingénierie biologique, agronomique et environnementale of UCL, the Walloon Agricultural Research Centre and the Gembloux Agricultural University.

On January 22th, the day before the conference, a special afternoon of introduction to sensory analysis and sensometrics is proposed to members of industries and research laboratories (in french).

Important dates

- Abstracts submission: September 10th, 2007
- Notification of communication acceptance: October 26th, 2007
- Deadline for registration at reduced rate: December 1st, 2007

Langage

In 2008, for the first time, the AGROSTAT conference will be organized out of France and the organizers would really like to welcome non French speakers. All slides of presentations and posters will be in English. Oral presentations will be in English or French but a simultaneous translation will be proposed.

Invited speakers

Jean-Philippe Vert, Ecole des mines de Paris, France

Judith Rousseau, Université Paris Dauphine, France

Jean-François Meulenet, Université d'Arkansas, USA

James Burger, BurgerMetrics Inc

FORTHCOMING STATISTICAL EVENTS

September 21, 2007 – Louvain-la-Neuve (UCL),
Young researchers day
More information: <http://www.uclouvain.be/en-44413.html>

September 28, 2007 – Louvain-la-Neuve (UCL),
François Roueff, Paris
More information: <http://www.uclouvain.be/en-44413.html>

October 3, 2007 – Louvain-la-Neuve (UCL),
Uwe WALZ, Goethe University Frankfurt
More information: <http://www.uclouvain.be/en-43677.html>

October 4, 2007 – Bruxelles (ECARES) “*Bayesian estimation of semiparametric duration models with spatial dependence*”
Guillaume Horny, Université de Strasbourg
More information:
<http://www.ecare.ulb.ac.be/ecare/seminars/current/current%20seminars.html>

October 8-10, 2007 – Eindhoven (Eurandom), Young European statisticians workshop (YES-I)
More information:
http://www.eurandom.tue.nl/workshops/2007/YES_1/YES_1_main.htm

October 10, 2007 – Louvain-la-Neuve (UCL),
Jean-François RICHARD, University of Pittsburgh
More information: <http://www.uclouvain.be/en-43677.html>

October 11, 2007 – Bruxelles (ECARES)
Veronika Czellar, University of Washington
More information:
<http://www.ecare.ulb.ac.be/ecare/seminars/current/current%20seminars.html>

October 12, 2007 – Louvain-la-Neuve (UCL), “*Regularly varying functions*”
Thomas Mikosch, University of Copenhagen, Denmark
More information: <http://www.uclouvain.be/en-44413.html>

October 17, 2007 – Louvain-la-Neuve (UCL),
Antoine RENUCCI, Université de Paris Dauphine
More information: <http://www.uclouvain.be/en-43677.html>

October 18, 2007 – Bruxelles (ECARES)
Kevin Sheppard, Oxford University
More information:
<http://www.ecare.ulb.ac.be/ecare/seminars/current/current%20seminars.html>

October 24, 2007 – Louvain-la-Neuve (UCL),
Shin Huei WANG, CORE
More information: <http://www.uclouvain.be/en-43677.html>

October 25, 2007 – Bruxelles (ECARES)
Jean-Pierre Urbain, University of Maastricht
More information:
<http://www.ecare.ulb.ac.be/ecare/seminars/current/current%20seminars.html>

October 26, 2007 – Louvain-la-Neuve (UCL),
Patrick Groenen, Erasmus University Rotterdam, The Netherlands
Michel van de Velden, Erasmus University Rotterdam, The Netherlands
More information: <http://www.uclouvain.be/en-44413.html>

November 7, 2007 – Louvain-la-Neuve (UCL), “*Can the evolution of implied volatility be forecasted? Evidence from European and US implied volatility indices*”
George SKIADOPOULOS, University of Piraeus
More information: <http://www.uclouvain.be/en-43677.html>

November 9, 2007 – Louvain-la-Neuve (UCL),
Godelieve Masuy-Stroobant, Institut de démographie, UCL, Belgium
More information: <http://www.uclouvain.be/en-44413.html>

November 14, 2007 – Louvain-la-Neuve (UCL),
Alexander KEMPF, University of Cologne
More information: <http://www.uclouvain.be/en-43677.html>

November 16, 2007 – Louvain-la-Neuve (UCL),
Peter Boswijk, University of Amsterdam, The Netherlands
Hashem Pesaran, University of Cambridge, UK
More information: <http://www.uclouvain.be/en-44413.html>

November 21, 2007 – Louvain-la-Neuve (UCL),
Ilias TSIAKAS, University of Warwick
More information: <http://www.uclouvain.be/en-43677.html>

November 23, 2007 – Louvain-la-Neuve (UCL),
Stephen Evans, London School of Hygiene and Tropical Medicine, UK
Marc Buyse, IDDI, Belgium
More information: <http://www.uclouvain.be/en-44413.html>

November 28, 2007 – Louvain-la-Neuve (UCL),
Evangelos SEKERIS, Federal Reserve Bank of Boston
More information: <http://www.uclouvain.be/en-43677.html>

November 29, 2007 – Louvain-la-neuve (CORE) ECORE-KUL Meeting
Hansen Pesaran, Cambridge University
More information:
<http://www.ecare.ulb.ac.be/ecare/seminars/current/current%20seminars.html>

November 29, 2007 – Bruxelles (ECARES)
Roel Oomen, Warwick Business School
More information:
<http://www.ecare.ulb.ac.be/ecare/seminars/current/current%20seminars.html>

November 30, 2007 – Louvain-la-Neuve (UCL),
Roland Fried
Ernesto San Martin, PUC, Santiago, Chile
More information: <http://www.uclouvain.be/en-44413.html>

December 5, 2007 – Louvain-la-Neuve (UCL),
Sébastien VAN BELLEGEM, Institute de Statistique and CORE, UCL
More information: <http://www.uclouvain.be/en-43677.html>

December 7, 2007 – Louvain-la-Neuve (UCL),
Winfried Theis, Unilever, The Netherlands
More information: <http://www.uclouvain.be/en-44413.html>

December 12, 2007 – Louvain-la-Neuve (UCL),
Erasmus GIAMBIONA, University of Amsterdam
More information: <http://www.uclouvain.be/en-43677.html>

December 14, 2007 – Louvain-la-Neuve (UCL),
Maria-Pia Victoria-Feser, Université de Genève, Switzerland
Christophe Croux, KULeuven, Belgium
More information: <http://www.uclouvain.be/en-44413.html>

December 17-21, 2007 – Brussels (ULB) Short course (4 times 2 hours) on “*Inference based on robust statistics*”

Matías Salibián-Barrera, University of British Columbia

More information: <http://www.stat.ubc.ca/~matias/>

December 19, 2007 – Louvain-la-Neuve (UCL),

Guillaume HORNY, IRES, UCL

More information: <http://www.uclouvain.be/en-43677.html>

December 19-20, 2007 – Antwerpen (UA) Short course (8 times 90 minutes) on “*A short introduction to discrete choice models*”

Michel Bierlaire, Ecole Polytechnique Fédérale de Lausanne

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

December 20, 2007 – Bruxelles (ECARES)

Russell Davidson, McGill University

More information:

<http://www.ecare.ulb.ac.be/ecare/seminars/current/current%20seminars.html>

January 21-23, 2008 – Louvain-la-Neuve (UCL) Short course (4 times 2 hours) on “*Statistical Inference for Curve Estimation and Classification*”

Lutz Dümbgen, University of Bern

More information: <http://www.imsv.unibe.ch/~duembgen/>

January (22) 23-25, 2008 – Louvain-la-Neuve (UCL) 10th European symposium on statistical methods for the food industry

More information: http://www.stat.ucl.ac.be/Agrostat2008/index_eng.html

February 7-8, 2008 – Brussels “*Actuarial and Financial Mathematics Conference: Interplay between Finance and Insurance*”

LONG TERM VISITORS

UCL– Institut de statistiques

07/09/07 - 21/09/07

Abdelaati Daouia, Université de Toulouse, France

03/09/07 - 15/09/07

Tadjidge Joseph, Universität Kaiserslautern, Germany

05/11/07 - 16/11/07

Cavaignac Laurent, Université de Perpignan, France

28/11/07 - 08/12/07

Ernesto San Martín, PUC Santiago, Chile

29/11/07 - 01/12/07

Fried Roland, Universidad Carlos III, Madrid, Spain

UHasselt – Centrum voor statistiek

Clarice Demetrio, Universidade de São Paulo, Escola Superior de Agricultura Luiz de Queiroz

Florin Vaida, University of California, San Diego

Jeannine Houwing-Duistermaat, Leiden University, The Netherlands

ULB – ECARES

2007-2008

Julio Davila, Université de Paris 1, Centre d'Economie de la Sorbonne

04/07-09/08

Julia Nafziger, University of Bonn

2006-

Carine Peeters, Duke University

05/07-11/07

Pierre Picard, University of Manchester

2006-

Miroslav Siman, Charles University, Prague

03/07-02/08

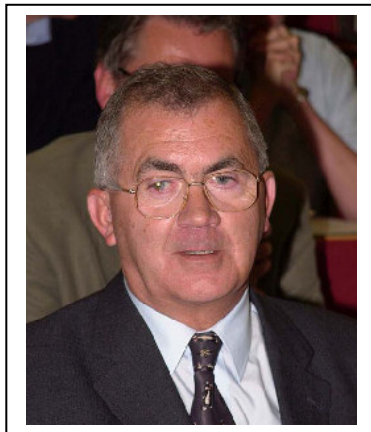
Philip Verwimp, PhD, University of Leuven and co-director of the
Households in Conflict Network

NEWS FROM OUR MEMBERS*

Peter Goos, Ivan Langhans and Martina Vandebroek will receive the Lloyd Nelson award from the Journal of Quality Technology Editorial Review Board for their paper

Goos, P., Langhans, I., Vandebroek, M., (2006) Practical Inference from Industrial Split-Plot Designs, *Journal of Quality Technology*, 38, 162-179.

The Lloyd S. Nelson Award recognizes the article in the most recent volume of JQT that had the "greatest immediate impact to practitioners." The JQT articles were reviewed based upon their innovative adaptation of traditional methods and their potential for everyday practicality.



The Quetelet Society (i.e. the Belgian Region of the International Biometric Society) has rewarded **Herman Callaert** the title of "Honorary member of the society" for his outstanding contribution to biometrics and biostatistics in Belgium. The society refers explicitly to the Biostatistics program at Hasselt University that has given many students the opportunity to get a high quality training in biostatistics. This has had a great influence on the expansion of statistics/biostatistics in Belgium, but also in other countries due to the many international students in the program. In its 55 year history, the Quetelet Society has only awarded the title of "honorary member" only twice.

*Members are invited to notify the B-Stat news editors about professional or position changes.

RECENT PHD THESES

Faculté Universitaire des Sciences Agronomiques (FUSAGx)

Planchon Viviane. *Outliers detection in mixtures of dissymmetric distributions for data sets with spatial constraints*. (2007) – Promotor: Prof. Jean-Jacques Claustrioux.

In the case of soil chemical analyses, frequency distributions for some elements show a dissymmetrical aspect, with a very marked spread to the right or to the left. A high frequency of extreme values is also observed and a possible mixture of several distributions, due to the presence of various soil types within a single geographical unit, is encountered. Then, for the outliers detection and the establishment of detection limits, an original outliers detection procedure has been developed; it allows estimating extreme quantiles above and under which observations are considered as outliers. The estimation of these detection limits is based on the right and the left of the distribution tails. A first estimation is realised for each elementary geographical unit to determine an appropriate truncation level. Then, a spatial classification allows creating adjoining homogeneous groups of geographical units to estimate robust limit values based on an optimal number of observations.

Université de Liège (ULg)

Magis David. *Influence, information and item response theory in discrete data analysis*. (4/5/2007) – Promotor: Prof. Gentiane Haesbroeck.

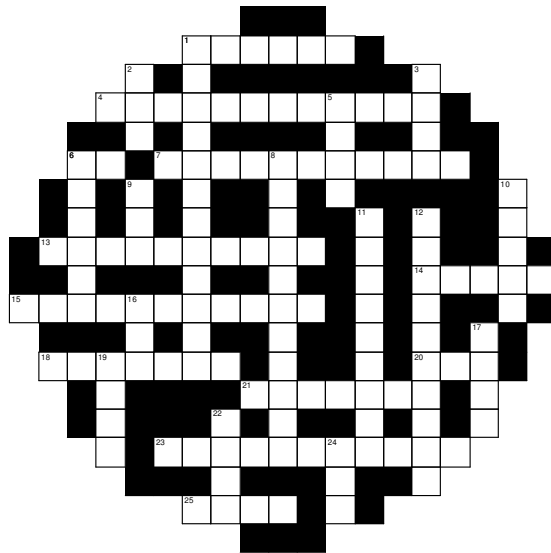
The main purpose of this thesis is to consider usual statistical tests for discrete data and to present some recent developments around them. Contents can be divided into three parts.

In the first part we consider the general issue of misclassification and its impact on usual test results. A suggested diagnostic examination of the misclassification process leads to simple and direct investigation tools to determine whether conclusions are very sensitive to classification errors. An additional probabilistic approach is presented, in order to refine the discussion in terms of the risk of getting contradictory conclusions whenever misclassified data occur.

In the second part we propose a general approach to deal with the issue of multiple sub-testing procedures. In particular, when the null hypothesis is rejected, we show that usual re-applications of the test to selected parts of the data can provide non-consistency problems. The method we discuss is based on the concept of decisive subsets, set as the smallest number of categories being sufficient to reject the null hypothesis, whatever the counts of the remaining categories. In this framework, we present an iterative step-by-step detection process based on successive interval building and category count comparison. Several examples highlight the gain our method can bring with respect to classical approaches.

The third and last part is consecrated to the framework of item response theory, a field of psychometrics. After a short introduction to that topic, we propose first two enhanced iterative estimators of proficiency. Several theoretical properties and simulation results indicate that these methods ameliorate the usual Bayesian estimators in terms of bias, among others. Furthermore, we propose to study the link between response pattern misfit and subject's variability (the latter as individual latent trait). More precisely, we present "maximum likelihood"-based joint estimators of subject's parameters (ability and variability); several simulations suggest that enhanced estimators also have major gain (with respect to classical ones), mainly in terms of estimator's bias.

statistical puzzle



Down

1. can be described by a density function
2. proportional hazard
3. class of robust tests
5. a dog's end
6. a way of convergence
8. not the null
9. estimator of the cdf
10. A reverend
11. smallest variance
12. used for validation of theory
16. difference between two quartiles
17. average
19. sample
22. nonparametric regression and classification method
24. model selection criterion

Across

- | | |
|--|--|
| 1. just as important as the statistical analysis | 23. measured by Pearson |
| 4. when the type I error rate is too small | 25. to discriminate between the null and the alternative |
| 6. standard deviation | |
| 7. before statistics | |
| 13. a covariate that we like to avoid | |
| 14. random and fixed | |
| 15. what scientists want us to prove | |
| 18. rank in the presence of ties | |
| 20. Pittman's efficiency | |
| 21. his space is loved by functions | |

Who are they? Answer...

Christian Ritter	Sophie Vanbelle	Peter Goos
Paul Janssen	Adelin Albert	Olivier Thas

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 December 31, 2007**, 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