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OUR MARCH EDITION IS PACKED WITH INTERESTING BITS ABOUT CORE’S LATEST ACTIVITIES, SO READ ON!

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GEOGRAPHY@CORE

GEOGRAPHY RELIES ON A RICH TOOLBOX OF TECHNIQUES, METHODS, AND MODELS SOMETIMES BORROWED FROM OTHER FIELDS.

by Isabelle THOMAS
Faculty Member

Read more on page 2.

GDF-SUEZ CHAIR

FOLLOWING ITS INAUGURATION IN JUNE 2014, THIS IS YOUR OPPORTUNITY TO LEARN MORE ABOUT THE GDF-SUEZ CHAIR.

by Anthony PAPAVASILIOU
Chairholder

Read more on page 3.
GEOGRAPHY
GEOGRAPHY

Geography seeks at understanding where things are and why they are there. Such a global endeavour can be pursued regarding any event on the earth’s surface, ranging from mountains to cities. The study of the spatial organisation of economic activities is called **Economic Geography**. Hence, this field of geography studies the same objects as Economics, but the research questions and methods used are different.

Economic Geographers look at locations (where are human activities?), places (what are these locations? In which attribute do they differ from other locations?) and at the relationships between places (how does human activity in a place affect activities in other neighbouring places?). To do so, they can rely on a rich toolbox of techniques, methods, indicators and models sometimes borrowed from other fields such as computer sciences, engineering, physics, economics, etc. In essence, geography is multidisciplinary and still challenging.

Geographers at CORE illustrate this variety of geographical research. On the one hand, for years they have been welcome and involved in several successful multidisciplinary research projects, because of their links with different initial orientations at CORE. Especially, they take part in projects from mathematical programming, economics, and econometrics as contributors of tools. On the other hand, they also manage their own research projects, thus contributing to CORE’s scientific production.

The **PRESENT ORIENTATIONS** of the ongoing geographic research carried at CORE mainly aim at measuring and modelling socio-economic, transport and urban/periurban realities. It combines theoretical reflection and real-world applications on topics such as:

(1) **OPTIMAL LOCATION MODELS**

The story of geographers at CORE started with optimal location-allocation models. Anchored in Operations Research, these models were questioned by geographers mainly in the sensitivity of their outputs to the measurement of the complex geographic realities but also to urban and regional dynamics. Applications were performed such as for fire stations in Belgium or health care facilities in Africa (past and forthcoming). Presently, we are working on school locations and allocations in dynamic urban environments (US and Chile), models flexible enough to address the uncertainty of the demand at each time period, while the maximum capacity of each school can be modified by the addition of modular units.

(2) **URBAN MODELLING**

Modelling the city is a fascinating topic given the complexity of the urban systems. Starting from models borrowed from classical urban economics, new avenues and extensions are theoretically as well as empirically explored. Theory and data driven models are used for testing the impact of green and social amenities on the morphology of cities, the influence of city delineation on modelling results, the importance of the shape of the network and the access-ability, etc. Besides theoretical developments, existing tools such as cellular automata, agent-based models, land-use and transport interaction models (LUTI) are also applied mainly in the sense of sensitivity analyses and hypotheses testing.

(3) **QUANTITATIVE GEOGRAPHY AND SPATIAL STATISTICS**

Quantitative geography mainly arose from the cross-fertilization and interaction of various specialty areas in physical and human geography; it is often defined as (1) the analysis of space and the creation of spatial information and geographical knowledge, (2) the development of spatial theory, and (3) the construction and application of mathematical models of spatial processes. This is why geographers at CORE are particularly interested in spatial statistics and spatial econometrics, and more particularly in the difficulties in measuring complex spatial realities (patterns, shapes, distance) and the biases introduced by space in statistical modelling (spatial heterogeneity, spatial dependence or contextual effects) but also to border delineation, nested scales or modifiable areal unit problems.

At CORE, a particular focus is put on built-up and non built-up morphologies. Density is not sufficient to discriminate built-up patches. Fractal and non-fractal indices are developed in collaboration with other universities for characterising built-up/green/blue patches and their border. Sensitivity analyses are performed on parameters, estimation and measuring techniques for patterns as well as borders. The connected world nowadays enables the use of enormous data bases leading to new challenges and new methodologies. Linking big data analysis to spatial theories is a challenge for the future.

**GEOGRAPHERS AT CORE**

Isabelle THOMAS (FRS-FNRS), Dominique PEETERS (UCL), Arnaud ADAM and Christophe CLOQUET (Innoviris), Justin DELLOYE (FRESH), Jonathan JONES (UCL), N. (to be hired soon- Belspo)
Two researchers are supported under the GDF-Suez Chair. Ignacio ARAVENA, PhD candidate, is working on the assessment of generation reserve requirements in the European power system in order to accommodate substantial amounts of renewable energy in the European electricity market. Mr ARAVENA will be hosted as a visiting researcher at the University of California at Berkeley and the Lawrence Livermore National Laboratory in June and July 2015. Dr HAN is working on the active control of transmission network assets and the optimal expansion of power grids. Eirgrid, the Irish Transmission System Operator, has assigned a study for the optimal expansion of the Irish transmission network in order to integrate offshore wind power at the British Isles.

The GDF-Suez Chair inauguration was held on June 3, 2014. 100 participants registered for the event. The inauguration was welcomed by the Rector and included keynote speakers from the European Commission and the University of California at Berkeley. A workshop was organized at the opportunity of the inauguration. Speakers from regulatory authorities (European Commission, CREG, United States Federal Energy Regulatory Commission), industry (GDF Suez, RTE France) and academia (UCL, UC Berkeley, Norwegian School of Economics) presented their views on capacity investment. On June 26, 2014, a summary of the workshop and an introduction of the GDF Chair was presented at the GDF Suez headquarters in Brussels.

The Belgian Electricity and Gas Regulatory Commission (CREG) has awarded a research grant to Professors PAPAVASILIOU, SMEERS and VAN VyVE for the study of capacity remunerations in conditions of scarcity in the Belgian electricity market. A press conference for the first round of results will be held on March 23, 2015.

The GDF-Suez Chair has hosted a number of visitors in 2014: Mette BJØRNDAL (Professor, Norwegian School of Economics), Hélène LE CADRE (research assistant, MINES Paris Tech), Yelena VARDANYAN (PhD candidate, KTH Stockholm), and Andre DInIZ (research staff, Electrobras CEPEL, Brazil).

A number of events are planned under the framework of the GDF-Suez Chair in 2015 and 2016: a research workshop will be held in order to celebrate the 3rd year anniversary of the Chair; the 4th research workshop of the Benelux Association for Energy Economics (BAEE) will be organized by the GDF-Suez Chair in October 2015 at CORE; and a panel session on computational energy economics will be held at the opportunity of the 50th anniversary of CORE.

For additional details about the GDF-Suez Chair, including publications, conference presentations, teaching material, events and openings please visit the following link:

The CORE Brown Bag Seminar arose from an idea of CORE PhD students Aditi DIMRI and Mery FERRANDO, and post-doc Elena MATTANA. Given the variety of research areas and topics worked on at CORE and the relevance of being trained at presenting one’s research from an early stage of the career, they felt a need for a platform for young researchers to share their work, and possibly even collaborate, and so the CORE Brown Bag was born. The goal of this internal seminar is to give the opportunity to young researchers at CORE to present and discuss their work with the other PhD students, post-docs and professors.

With eager support from both young researchers and faculty alike, the first seminar took place on October 15, 2014. All young researchers in Economics, Econometrics and Operations Research at UCL are invited to present their work in progress. There has been positive response from young researchers at CORE and also IRES, who are keen to utilize this opportunity to present their work. The seminar meets every two weeks on Wednesdays and sandwiches are offered to all participants. Presentations last for 45 minutes and are followed by questions and discussions of around 15 minutes.

The seminar has already had an eclectic array of presentations including urban, public, macro & development economics, and operational research. With an average turn out of 22 attendees per seminar, the discussions are lively and beneficial for the presenters.

Benoît DeCERF presented his paper “Income Poverty Measures with Relative Poverty Lines” during one of the last Brown Bag Seminars on February 11th in front of a focused audience.
MEQIN CONFERENCE
INTERNATIONAL MEQIN CONFERENCE ON WELL-BEING
LOUVAIN-LA-NEUVE, MARCH 18, 2015

In March 18, CORE will host the BRAIN/MEqin international conference on well-being. The first half of the day will be devoted to the presentation of the survey questionnaire to the members of the follow-up committee. This committee is composed of members of Belgian administrations interested in the project, and of scientists. The survey questionnaire aims at collecting data on the different dimensions of well-being (health, job, consumption, time use, housing and social relations) as well as eliciting data about the way people trade-off among the different dimensions. The questionnaire should be administered next Fall to a sample of about 4000 Belgian adults. The second part of the day will be devoted to three talks on the empirical measurement of well-being, by Olivier BARGAIN (Aix-Marseille School of Economics), Marc FLEURBAEY (Princeton University), and Stéphane LUCCHINI (Aix-Marseille School of Economics), as well as formal discussions of the talks.

SoFiE FINANCIAL ECONOMETRICS SPRING SCHOOL
BRUSSELS, JUNE 1-5, 2015

The SoFiE (Society for Financial Econometrics) Financial Econometrics Spring School is an annual week-long research-based course for PhD students and new faculty in financial econometrics. It will be held in Brussels, in the venue of the National Bank of Belgium, on June 1-5, 2015. It was formerly organized in Oxford (in 2012 and 2013). It is jointly sponsored by CORE, FINS@VUB, Fondation Louvain, KU Leuven, the Louvain School of Management Research Institute, the National Bank of Belgium, TreeTop AM, and ULB.

The 2015 lecturers are Prof. Patrick GAGLIARDINI (University of Lugano & the Swiss Finance Institute) and Prof. Eric RENAUD (Brown University, current President of SoFiE).

The lectures are organized around four themes:

1. The role of stochastic volatility in option pricing. Options prices as expectations of a Black-Scholes price. The volatility smile and the VIX.
3. Extensions of the Generalized Method of Moments (GMM). Indirect Inference, Implied-States GMM, GMM with a continuum of moments, XMM.
4. Nonparametric methods to fit the implied volatility surface. Implied binomial trees and maximum entropy.

The number of participants is limited to thirty. Participants have a chance to make short presentations of their work related to the topics of the lectures.

For more details, see http://sofie.stern.nyu.edu/node/524.

CORPORATE FORUM
7TH CORPORATE FORUM ON SUPPLY CHAIN MANAGEMENT
LOUVAIN-LA-NEUVE, APRIL 23, 2015

The 7th Corporate Forum will be held in Louvain-la-Neuve on April 23. This annual event gathers corporate partners, alumni of our executive and graduate supply chain programs and researchers in the field. The goal is to discuss recent trends, successful and innovative applications of supply chain concepts in the industry and current research projects. It is of course a great networking opportunity, and the dinner is a key moment of this event. If you want to participate or get more information, please send an email to axelle.depireux@uclouvain.be.

OR WORKSHOP
18TH CEMS WORKSHOP ON LOGISTICS AND SUPPLY CHAIN MANAGEMENT, BRUSSELS, APRIL 30, 2015

The 18th CEMS workshop on Supply Chain Management will take place in Université Saint-Louis (Brussels) at April 30. As usual, the goal is to give PhD students and young researchers of foreign-but-close universities the opportunity to present their current research and to discuss with professors in the field. If you want to participate or get more information, please send an email to axelle.depireux@uclouvain.be.

DOCTORAL COURSE
5TH CEMS PHD COURSE ON MARKET LIQUIDITY
BRUSSELS, JUNE 10-12, 2015

The Center for Studies in Asset Management of the ISLM (CeSAM), the AFI department of the KULeuven, and CORE are jointly organizing the 5th edition of the CEMS PhD course devoted to “Market Liquidity” on June 10-12, 2015. This 3-day intensive course will be taught by Professors Thierry FOUCAULT (HEC Paris) and Marco PAGANO (University of Naples), and will take place at the National Bank of Belgium in Brussels. For more information on deadlines and registration, see http://www.uclouvain.be/en-323840.html.
ECORES SUMMER SCHOOL

ON MARKET POWER
BRUSSELS, MAY 26-29, 2015.

On May 26-29, ECORES is organizing its biannual summer school. The school will be hosted by ECARES, at ULB, Brussels. The title of the school is “Market Power”. Economic models that incorporate market power resemble actual market interactions more closely. As a result, they are more directly testable and provide a useful framework for empirical work. The invited speakers have been instrumental in conducting and motivating structural empirical analysis. There will be three keynote speakers, each of whom will give three lectures. Paul KLEMPERER (Oxford University) will talk on multi-object auctions. Marc MELITZ (Harvard University) will speak on the micro-structure of trade. Ariel PAKES (Harvard University) will speak on the estimation of static and dynamic models in industrial organization. In addition to the keynote lectures, there will be presentations by PhD students and young PhD graduates. Previous ECORES summer schools attracted more than 100 participants.

To register, please visit: http://www.uclouvain.be/en-482657.html

PORESP SUMMER SCHOOL

ON ANTI-POVERTY POLICIES & INDIVIDUAL RESPONSES
BRUSSELS, JULY 6-9, 2015.

On July 6-9, we will hold a Summer School on “Anti-poverty Policies and Individual Responses” in Brussels. Four keynote speakers have accepted to participate and give three lectures. Marianne P. BITLER (UC Irvine) will speak on the distribution of impacts of social policies on beneficiaries. Marc GURGAND (Paris School of Economics) will speak on “Education and social origin: access and success”. Martin RAVALLION (Georgetown University) will speak on the evaluation of anti-poverty policies. All three are economists. Martha E. WADSWORTH (Pennsylvania State University), a psychologist, will speak on the effects of poverty and economic inequality on human development and functioning. In addition to the keynote lectures, there will be presentations and posters by PhD students and young PhD graduates. A few grants will be assigned to students from developing countries to help them attend the school. The “Fondation Universitaire” has accepted to host the event.

To register, please visit: http://www.uclouvain.be/en-503931.html
Past Scientific Events

**PAST SCIENTIFIC EVENTS**

**ET WORKSHOP**

**ON INDUSTRIAL ORGANIZATION IN THE DIGITAL ECONOMY**

**LIÈGE, MARCH 6-7, 2015**

Axel Gautier (CORE and Liège Competition and Innovation Institute, LCI) and Paul Belleflamme (CORE and Louvain School of Management) have organized a workshop on “Industrial Organization in the Digital Economy”. This two-day workshop took place in Liège on March 6-7, 2015. The keynote speakers were Jacques Cramer (Toulouse School of Economics) and Nicolas Petit (Liège University). The workshop was targeted at PhD students and young postdoctoral scholars. Fourteen papers were presented on topics like multisided platforms, online news, social networks, net neutrality, Internet advertising, digital piracy, privacy, cybersecurity, interchange fees, e-books, or patent pools.

**BEED 2015**

**8TH BELGIAN ENVIRONMENTAL ECONOMICS DAY**

**LOUVAIN-LA-NEUVE, FEBRUARY 5, 2015**

The 8th Belgian Environmental Economics Day (BEED 2015) was organized at CORE on February 5, 2015, by Thierry Béchet and Paul Belleflamme on behalf of the Lhoist Berghmans Chair in Environmental Economics and Management, but also in close collaboration with Johan Eyckmans and Sandra Roussева (KU Leuven), Steven Van Passel (UHasselt) and Tom Verbeke (KU Leuven and UGent). BEED offers an opportunity to researchers in the areas of environmental, resource and ecological economics from universities, university colleges or research institutes in Belgium to share and discuss their work. It is an academic meeting open to all interested stakeholders (academics, public servants, consultants, students, etc.) and it is also an intermediate platform between individual researchers and international professional associations (European Association of Environmental and Resource Economists, International Society of Ecological Economics, etc.). Nine speakers from the three Belgian regions as well as from the UK, Italy and France presented their research. Vincent Van Steenberghe (Belgian Federal Administration), a former PhD student at CORE, was the keynote speaker. He presented a study carried out by the Federal Administration on the energy transition in Belgium (“Towards a low-carbon economy 2050”).


**IMMAQ WORKSHOP**

**ON PENSION AND AGEING**

**LOUVAIN-LA-NEUVE, JANUARY 27, 2015**

Pension and ageing are for sure among the most important macroeconomic challenges of the next decades. In many countries, including Belgium, populations are rapidly ageing, due to the combined effect of decreasing fertility rates and increasing life expectancy.

This demographic evolution, but also other social and economic evolutions, will lead to major financial problems in the long run for our social security system and other insurance mechanisms. These important questions were at the heart of the latest IMMAQ workshop on pension and ageing that took place on January 27.

This workshop has been the opportunity for researchers from the three centers of IMMAQ (CORE, IRES, and ISBA) to present these last works and to exchange ideas and future developments. It is well known that the pension question must be addressed in a multi-disciplinary approach and the diversity of the techniques presented during this workshop illustrates perfectly the various and complementary expertise within our IMMAQ Institute.

Among the key questions addressed during the seminar:

- how to ensure simultaneously sustainability and fairness of a pension reform in Belgium
- how to build automatic balance mechanism in pay-as-you-go public pension schemes
- how to mix optimally pay-as-you-go and funded schemes
- how to increase the employability of old workers
- how to explain the slow development of long term care programs
- how to develop a new point system based on intergenerational and intragenerational justice

**OR WORKSHOP**

**17th CEMS WORKSHOP ON LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

**BRUSSELS, DECEMBER 3, 2014**

The 17th CEMS workshop on Logistics and Supply Chain Management took place in Brussels on December 3, 2014. We had the opportunity to have three interesting talks related to transportation. Bart Jourquin (UCL) described the NODUS multimodal network model and its various applications. Pierre Yves Mistaen (UCL) talked about express shipment network design, and Manuel Herrera (AltaGracia) described a problem related to capacity restrictions in the Panama Canal. Other talks discussed incentives and their consequence in inventory management (Michael Becker-Peth, Univ of Koln) and load retrieval optimal sequences in puzzle-based storage systems (Masoud Mirzaei, Erasmus University). As usual the discussions between the 20 participants were animated and fruitful.
WINTER SCHOOL & WORKSHOP

JOINT UNAMUR-UCL EVENT ON NETWORKS IN ECONOMICS AND FINANCE
LOUVAIN-LA-NEUVE, DECEMBER 1-5, 2014.

A s part of the research agenda of the ARC project on “Fi-
nancial Complexity”, the CeReFiM and naXys from UNam-
mur, CORE and ILSM from UCL and MISC (Maison Interdisci-
plinaire des Systèmes Complexes) from the Université d’Orléans, 
jointly organized their first Winter school and Workshop on “Net-
works in Economics and Finance” on December 1-5, 2014 at LSM.

The main objective was to gather researchers interested by the the-
oretic and econometric modelling of interacting agents behaviors, 
complexity and networks, over four days of lectures ended by one 
day workshop where scholars could present their ongoing work on 
the broad topic with an emphasis on applications in the fields of 
economics and finance.

Two short courses, given by Dr. M. KÖNIG (Univ. of Zürich) on “Net-
work theory and its applications in economics and finance” (De-
cember 1-2, 2014), and by Prof. E. KOŁACZYK (Boston Univ.) on the 
“Statistics of Networks” (December 3-4, 2014), were followed by a 
workshop (December, 5) with contributions from invited speakers in 
the morning (Prof. S. BATTISTON, Univ. of Zürich; Prof. S. MARKOSE,
University of Essex; and Prof. K. YILMAZ, Univ. of Koç) then poster 
and parallel sessions featuring submitted contributions on various 
topics (financial networks, trade networks, network econometrics, 
network theory) at lunch time and in the afternoon.

The audience was very diverse with more than 75 participants from 
both Belgian (UCL, KUL, ULB, Ghent Univ., UNamur) and non-Belgian 
universities (from Denmark, France, Germany, Italy, the Netherlands, 
Spain, Hungary, the UK, Turkey and the US) as well as non-academic 
institutions (ING, NBB, De Nederlandsche Bank). Given its success, it 
is now expected to organize this event on a yearly basis alternating 
the location of the various sites involved.

For more information about the program of the event as well as the 
papers presented during the workshop see: http://uclouvain.be/en-
476278.html

PROJECTS/FUNDING

BRAIN

GRESP-HEALTH, DURATION OF THE 
PROJECT: 15/12/2014 - 15/03/2019

U nder the coordination of Benoit NEMERY (KUL), Isabelle 
THOMAS, along with Tim NAWROT (UHasselt), Catherine 
BOULAND (ULB), Patrick DEBOOSERE (VUB) and An VAN NIEUWENHUYSE 
(ISP-WIV), obtained BRAIN funding for a project called GRESP-Health (im-
pact of green/blue spaces on specific morbidity and cause-specific mortal-
ity in Belgium).

INNOVIRIS

BRU-NET, DURATION OF THE PROJECT: 
15/12/2014 - 15/03/2019

Sabelle THOMAS, along with Vincent BLONDEI (be-
fore he was elected Rector of UCL), also obtained Innoviris 
funding for the project BRU-NET (Un nouveau regard sur les relations à 
l’intérieur de l’aire métropolitaine bruxelloise). She will be helped by 
researchers Christophe CLOquet and Arnaud ADAM.
ISABELLE THOMAS
BELGIAN FRANQUI CHAIR 2014-2015
ANTWERPEN, MARCH - MAY 2015

Isabelle THOMAS was awarded the Belgian Francqui Chair 2014-2015 last October, with a lecture series under the umbrella theme of “Measuring and modeling in economic and transport geography: challenges and opportunities”. The inaugural lecture was given on March 4, in Antwerpen.

Her lecture can be watched online at the following url: http://mediasite.ua.ac.be/mediasite/Catalog/catalogs/TEW_Francqui_Leerstoel_2015

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JEAN HINDRIK

LOBBY MAG: EXPERT OF THE YEAR 2014
BRUSSELS, DECEMBER 2014

Jean HINDRIK has been nominated in the category “expert of the year 2014” by the magazine Lobby. The motivation of this selection is the contribution of Prof. HINDRIK to the Pension Reform Commission report published in June 2014 and his unflagging effort to promote this report to a large public via press interviews, television debates and conferences. The jury has appreciated the capacity of Prof. HINDRIK to communicate in a simple way on technical issue such as the pension reform, as well as his independence, his capacity to keep away from the political debate and to resist recuperation by major political parties. Prof. HINDRIK also intervenes frequently in the media on other issues such as education policies, public governance and public finance. For more information, see: www.lobbymag.com

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ELENA MATTANA
2ND SUERF/UNICREDIT & UNIVERSITIES FOUNDATION RESEARCH PRIZE, DECEMBER 2014

The paper “A Dynamic Quantitative Macroeconomic Model of Bank Runs” (CORE DP 2014/68) by Elena MATTANA, with coauthor Ettore Panetti from Bank of Portugal, was nominated one of the two winners of the 2nd SUERF/UniCredit & Universities Foundation Research Prize. The other winner was a paper by Roberto ROBATO of University of Wisconsin-Madison. The prizes were awarded on December 11 at the Vienna University of Economics and Business, during the workshop on the subject “Reregulation of the Financial Sector - Economic Consequences, Costs and Benefits”.

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PRIZES & AWARDS

PRIZES & AWARDS
PAGE 9
ANIELE CATANZARO was awarded a Doctorate in Sciences (Operations Research) in 2008 for his studies in combinatorial optimization and mixed integer programming. He was appointed as Chargé de Recherches of the Belgian National Fund for Scientific Research (2009-2013) and Assistant Professor at the Department of Operations of the Rijksuniversiteit Groningen (2013-2014). He was visiting research scientist at the Department of Statistics and Operations Research of the University of La Laguna, the Tepper School of Business and the Department of Biological Sciences of the Carnegie Mellon University. As of September 2014, he joined the Université catholique de Louvain where he now serves as Assistant Professor of Operations Research at the Louvain School of Management. Daniele Catanzaro’s interests involve combinatorial optimization, integer programming and medical bioinformatics.

RÉDÉRIC VRINS graduated in electromechanical (mechatronics) engineering at UCL in 2002. From 2002 to 2007, he worked as a research assistant at the department of electrical engineering of the Ecole Polytechnique de Louvain. His thesis dealt with blind source separation problems from the information theory point of view. Following his Ph.D, Frédéric spent seven years in the private sector as a Front Office Quantitative Analyst within the Financial Markets department of ING Bank (trading floor). Frédéric is currently Assistant Professor of Quantitative Finance at Louvain School of Management and Regional Director of PRMIA (Professional Risk Managers’ International Association) for Belgium. His research interests cover mathematical finance in general, with a special focus on default risk modeling, structured products pricing, as well as stochastic processes & bounded martingales applied to finance.

HRISTOPE CLOQUET received his PhD in Engineering Sciences from the Université libre de Bruxelles in July 2011, under the supervision of Serge Goldman and Michel Defrise. His general interest is in mobile phone and social network data analysis. He runs a small company developing mobile solutions for mass gatherings. At CORE, he will work part-time with Isabelle THOMAS and Arnaud ADAM as part of the SMART-BRU project, aiming at studying the relationships between Brussels and its surrounding region.

EBASTIAN STICH received his PhD from ETH Zürich where he was associated with the “Theory of Combinatorial Algorithms” group of Emo Welzl. In his dissertation he studied randomized methods for convex optimization, under the supervision of Bernd Gärtner. His main research interests are the theoretical investigation of (randomized) schemes for high-dimensional optimization and stochastic variable metric methods. At CORE, he will work with François GLINEUR and Yuri NESTEROV as a part of the ARC project “Mining and Optimization of Big Data Models”.

YUKAI YANG has taken the postdoctoral research fellow position at the Finance and Insurance (FINS) research group at the Faculty of Economics and Social Sciences, Vrije Universiteit Brussel in the beginning of 2015. He is currently working on developing a shrinkage covariance estimator for portfolio selection.
BROWN BAG

MARCH 23, 2015, AT 12:45 P.M.
Joniada MILLA, CORE
Nature or Nurture in Tertiary Education Attendance? Intergenerational Implications of the Vietnam-Era Lottery

APRIL 22, 2015, AT 12:45 P.M.
Sinem BAS, CORE

MAY 5, 2015, AT 12:45 P.M. (TUESDAY)
Aditi DIMRI, CORE

MAY 20, 2015, AT 12:45 P.M.
André ROMAHN, KUL

ECONOMETRICS

MARCH 16, 2015 AT 2:30 P.M. (JOINT WITH LSM FINANCE SEMINAR)
Monica BILLIO, Università Ca’ Foscari Venezia
Sovereign, Bank and Insurance Credit Spreads: Connectedness and System Networks

MARCH 30, 2015 AT 2:30 P.M.
Clifford LAM, LSE
One-Step Regularized Spatial Weight Matrix and Fixed Effects Estimation with Instrumental Variables

APRIL 20, 2015 AT 2:30 P.M.
Philippe DESCHAMPS, Université de Fribourg
Alternative formulations of the leverage effect in a stochastic volatility model with asymmetric heavy-tailed errors

APRIL 27, 2015 AT 2:30 P.M. (JOINT WITH LSM FINANCE SEMINAR)
Christophe HÜRLIN, Université d’Orléans

MAY 4, 2015 AT 2:30 P.M.
Erick W. RENFIGO, Fordham University

MAY 18, 2015 AT 2:30 P.M. (JOINT WITH LSM FINANCE SEMINAR)
Xiaodong LIU, University of Colorado Boulder
GMM Identification and Estimation of Peer Effects in a System of Simultaneous Equations

JUNE 1, 2015 AT 2:30 P.M.
Sebastian FINDEISEN, University of Mannheim

ECORES

MARCH 23, 2015, 1:30 P.M. (LOCATION: ECAES)
1:30 p.m.: Claude D’ASPREMONT
Oligopolistic vs Monopolistic Competition: Do Intersectoral Effects Matter?
2:25 p.m.: Victor GINSBURGH
Foreign Language Learning. An econometric Analysis
3:15 p.m.: Mathias DEWATRIPOULT
TBA

OPERATIONS RESEARCH

MARCH 24, 2015, 4:30 P.M.
Ralf WERNER, University of Augsburg

MARCH 26, 2015, 2:00 P.M.
Iva RASHKOVA, London Business School
Public Multi-Product Health Procurement: The Dynamic Inventory Budget Allocation Problem

MARCH 31, 2015, 4:30 P.M.
Jean-Patrice NETTER, DIAGMA Supply Chain Services

IMMAQ TRADE AND ECONOMIC GEOGRAPHY

MARCH 19, 2015, 12:45 P.M. (JOINT WITH IRES RESEARCH SEMINAR)
Frédéric ROBERT-NICOU, Université de Genève
Are Cities Too Small? Equilibrium and Optimal Urban Systems with Heterogeneous Land

MARCH 26, 2015, 12:45 P.M. (JOINT WITH IRES RESEARCH SEMINAR)
Holger BREINLICH, University of Essex

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Frédéric ROBERT-NICOU, Université de Genève
Are Cities Too Small? Equilibrium and Optimal Urban Systems with Heterogeneous Land

MARCH 26, 2015, 12:45 P.M. (JOINT WITH IRES RESEARCH SEMINAR)
Holger BREINLICH, University of Essex
Recent Advances in Optimization and its Applications in Engineering
ed. by Moritz Diehl, François Glineur, Elias Jarlebring, Wim Michiels
Springer, 2010

Mathematical optimization encompasses both a rich and rapidly evolving body of fundamental theory, and a variety of exciting applications in science and engineering. The present book contains a careful selection of articles on recent advances in optimization theory, numerical methods, and their applications in engineering. It features in particular new methods and applications in the fields of optimal control, PDE-constrained optimization, nonlinear optimization, and convex optimization. The authors of this volume took part in the 14th Belgian-French-German Conference on Optimization (BFG09) organized in Leuven, Belgium, on September 14-18, 2009. The volume contains a selection of reviewed articles contributed by the conference speakers as well as three survey articles by plenary speakers and two papers authored by the winners of the best talk and best poster prizes awarded at BFG09. Researchers and graduate students in applied mathematics, computer science, and many branches of engineering will find in this book an interesting and useful collection of recent ideas on the methods and applications of optimization.

Jean Hindriks

Quel avenir pour nos pensions?
De Boeck, 2015

En ce qui concerne les pensions, un constat d’échec s’impose car
- en dépit des avertissements répétés depuis plusieurs décennies
- nous n’avons rien fait pour adapter de façon structurelle notre
système des pensions au vieillissement de la population et aux mutations socioéconomiques du 21e siècle.

Le phénomène du vieillissement n’est pas nouveau. Ce qui a changé, c’est qu’il coïncide aujourd’hui avec les départs à la pension. Le nombre de pensionnés augmente fortement et il représente une part croissante de la consommation totale, ce qui va peser inévitablement à l’avenir sur la consommation des actifs. Nous sommes en conséquence devant un nouveau conflit des classes d’âge, et cette tension entre générations menace de saper la solidarité sur laquelle reposent les pensions.

Pour réformer les pensions, il faut au préalable faire tomber certains mythes que l’on a pourtant mis tant d’énergie et de talent à ériger. Cet ouvrage s’attelle à les abattre et, ce faisant, il vise à mieux comprendre comment la question des pensions repose sur de nombreux malentendus et incompréhensions qu’il faut maintenant lever pour entreprendre sereinement cette réforme qui ne peut plus attendre.

Dans un langage clair et accessible, l’auteur présente les enjeux et l’avenir de nos pensions pour nous permettre d’anticiper les changements et de préparer notre pension en toute confiance. À l’instar de la Commission de réforme des pensions, il propose notamment un système de pension à points pour ôter l’interrogation qui pèse actuellement sur les pensions. Plus de sécurité, d’équité, de souplesse et de lisibilité sont les points cardinaux de cette réforme.

Si le rapport de la Commission de réforme des pensions est en arrière fond de l’ouvrage, celui-ci a le mérite de mettre à la portée d’un large public les grands défis et les contours de notre futur système de pension. Il concerne donc les artisans de cette réforme au sein des institutions de pension, des assurances et fonds de pension, des administrations et entreprises, du monde politique et des partenaires sociaux mais aussi chacun d’entre nous qui s’interroge sur l’avenir de sa pension!
PUBLICATIONS

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ENVIRONMENTAL ECONOMICS


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DISCUSSION PAPERS

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2014/53. Luc BAUWENS, Manuela BRAIONe and Giuseppe STORTI. Forecasting comparison of long term component dynamic models for realized covariance matrices.


2014/61. TIMO TERASVIRTA and Yukai YANG. Linearity and misspecification tests for vector smooth transition regression models.


2015/7. Luc BAUWENS, Jean-François CARPANTIER and Arnaud DUFAYS. Autoregressive moving average infinite hidden markov-switching models.

ENVIRONMENTAL ECONOMICS

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GAME THEORY

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2014/66. Jean HINDRIKS and Guillaume LAMY. Back to school, back to segregation?


2015/5. Marc FLEURBAEY and François MANIQUET. Optimal taxation theory and principles of fairness.


TRADE, TRANSPORT & GEOGRAPHY

2014/47. Takatoshi TABUCHI, Jacques-François THISSE and Xiwei ZHU. Does technological progress affect the location of economic activity?
Surprise! The International Dinner Party is coming back!
Room B-135 (Core), March 20, 2015, 6:30 p.m.

Save the date! The concept is simple: Everybody has to bring a typical dish of their own country (enough food for 3 people if coming alone, or for 6 if coming with somebody). The room will be decorated following a theme kept secret by Catherine.

Interested? Join us! There is a table in the lounge where you can write your name, if you plan to come alone or with someone, the kind of dish you will bring (in order to avoid similar dishes) and mention if you would like to help with the practical organisation.

There will also be a contest for the best “hors d’oeuvre”, the best “main dish”, the best “dessert” and an originality prize. CORE provides drinks.

If you have any questions, feel free to contact Catherine (catherine.germain@uclouvain.be).