

Stochastic Analysis and Applications

Welcome to the second Linnaeus University Workshop in Stochastic Analysis and Applications to be held in Växjö, Sweden, 27-28 June 2011.



The International Center for Mathematical Modelling in Physics, Engineering and Cognitive Sciences (ICMM) at Linnaeus University invites all interested to the second Linnaeus University Workshop in Stochastic Analysis and its Applications (LSAA).

This two-day workshop deals with analytical and numerical results of stochastic models. It addresses two topics of intensive and growing research activities:

- **Backward-Forward Equations**, with many important applications in financial mathematics.
- **Time-Series Econometrics**. In 2003, Granger and Engle received the Nobel Prize in Economics for their research in Time-Series Econometrics.

The conference addresses an interdisciplinary audience. The official language is English, and all presentation material should be in English. LSAA is financially supported by [The Swedish Research Council](#) (Vetenskapsrådet).

Organizing committee

The interdisciplinary interests in this field are manifested in the organizing committee:

- **Jan Ekberg**, the School of Business and Economics, Linnaeus University, Växjö, Sweden
- **Astrid Hilbert**, the School of Computer Science, Physics and Mathematics, Linnaeus University, Växjö, Sweden
- **Bernt Øksendal**, Department of Mathematics, CMA and University of Oslo, Norway

Learn more about the workshop by clicking the links in the right column.



Programme and participants

List of participants and speakers

- Haidar Al-Talibi, DFM, Linnaeus University, Sweden
- Rani Basna, Linnaeus University, Sweden
- Tomas Björk, Stockholm School of Economics, Sweden *
- Jeffrey Collamore, Copenhagen University, Denmark *
- Richard A. Davis, Columbia University, NY, USA *
- Boualem Djehiche, KTH, Stockholm, Sweden *
- Jan Ekberg, School of Business and Economics, Linnaeus University, Sweden
- Said Hamadène, University of Maine, Le Mans, France *
- Astrid Hilbert, DFM, Linnaeus University, Sweden
- Mia Hinnerich, Aarhus University, Denmark *
- Peter Imkeller, Humboldt University, Berlin, Germany *
- Claes Jogrèus, Blekinge Institute of Technology, Sweden
- Karoline Johansson, DFM, Linnaeus University, Sweden
- Mariana Khapko, Stockholm School of Economics, Sweden
- Yushu Li, Aarhus University, Denmark *
- Mikhael Nechaev, Halmstad University, Sweden *
- Hiba Nassar, DFM, Linnaeus University, Sweden
- Peter Nyman, DFM, Linnaeus University, Sweden
- Bernt Øksendal, CMA and University of Oslo, Norway *
- Roger Pettersson, DFM, Linnaeus University, Sweden
- Ghazi Shukur, Jönköping International Business School, Sweden *
- Agnès Sulem, Paris - Rocquencourt, France *
- Mutaz Tuffaha, DFM, Linnaeus University, Sweden
- Wei Yang, Warwick University, Great Britain *
- Ekaterina Yurova, DFM, Linnaeus University, Sweden

The speakers are marked with a *.

Preliminary programme

Main conference room: B1006, building B

Monday

10.00-10.10 Welcome

10.10-10.55

Richard A. Davis

Columbia University, New York, USA

Noncausal Vector AR Processes with Application to Financial Time Series

11.00-11.45

Tomas Björk

Stockholm School of Economics, Sweden

Time Inconsistent Stochastic Control Theory

11.50-12.15

Mia Hinnerich

Aarhus University, Denmark

Continuous Time Mean Variance Optimization under Partial Information

12.20-13.30 Lunch at Restaurant Rasken

13.30-14.15

Peter Imkeller

Humboldt University, Germany

Optimization and (F)BSDE of Quadratic Growth

14.20-15.05

Bernt Øksendal

CMA, Oslo University, Norway

Optimal Control of SPDEs with Delay

15.10-15.35

Jeffrey Collamore

University of Copenhagen, Denmark

Tail Estimates for Stochastic Fixed Point Equations via Nonlinear Renewal Theory

15.40-16.10 Coffee Break

16.10-16.55

Agnès Sulem

Paris - Rocquencourt, France

Forward-backward SDE Games and Optimal Strategies under Model Uncertainty for General Utilities

17.00-17.45

Said Hamadène

University of Maine, Le Mans, France

Viscosity Solutions of Systems of PDEs with Interconnected Obstacles and Multi-Modes Switching Problem

17.50-18.15

Wei Yang

Warwick University, Coventry, GB

Nonlinear Markov Processes

19.00

Dinner at Teleborgs slott

Tuesday

9.00-9.45

Boualem Djehiche

KTH, Stockholm, Sweden

Graduation Techniques Revisited

9.50-10.15

Mikhail Nechaev

Halmstad University, Sweden

On Kalman Filter Application for Risk Estimation of Derivatives Portfolio

10.20-10.50 Coffee Break

10.50-11.25

Ghazi Shukur

Jönköping Internationsl Business School

Linnaeus University, Växjö, Sweden

A New Ridge Regression Causality Test in the Presence of Multicollinearity

11.30-12.15

Yushu Li

Aarhus University, Denmark

Wavelet Based Outlier Correction for Power Controlled Turning Point Detection in Surveillance Systems

12.20-12.45

Roger Pettersson

Linnaeus University, Växjö, Sweden

Asymptotics for an Epidemics Model

13.00 Lunch at Restaurant Rasken

Abstracts

The abstracts sent to us up to June 17 can be found by clicking the corresponding link in the right column.

Travel and accomodation

Accomodation

Please observe that each participant has to book hotel accommodation by him-/herself.

Special rates have been negotiated with hotels for participants of the conference. You will receive a booking code for this after your registration.

Elite Park Hotel Konserthuset (formerly known as Quality Hotel Konserthuset)

Västra Esplanaden 10-14

Box 434, SE-351 06 Växjö, Sweden

Phone: +46 (0)470-70 22 00

Fax: +46 (0)470-475 77

E-mail: info.parkvaxjo@elite.se

Web: www.elite.se/eng/node/1336

Elite Stadshotellet Växjö

Kungsgatan 6

Box 198, SE-351 04 Växjö, Sweden

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Fax: +46 (0)470-448 37

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Teleborgs Slott (Teleborg Castle)

SE-351 96 Växjö, Sweden

Phone: +46 (0)470-77 86 60

Fax: +46 (0)470-77 89 62

E-mail: info@teleborgsslott.com

Web: www.teleborgsslott.com (in Swedish)

Travelling to Växjö

How to get to Linnaeus University in Växjö

For connection to international flights, a taxi is recommended: Växjö Taxi, +46 (0)470-135 00, or Värends Taxi +46 (0)470-169 00. The taxi stand is situated at Resecentrum (the Travel centre, i.e. the train and bus station).

Travelling between central Växjö and Linnaeus University

There are three alternatives for travelling by bus between Resecentrum and the university:

- Route 7 (Centrum->Universitetet and Universitetet->Centrum) goes directly between Resecentrum and the university, and is thus recommended.
- Another alternative is to take bus no 1 (Centrum->Teleborg and Teleborg->Centrum) or 5 (Centrum->Lugnadal->Teleborg and Teleborg->Lugnadal->Centrum) to/from Teleborgs Centrum, which is located at 8–10 minutes walking distance from the university.

All bus routes are operated by Länstrafiken Kronoberg. [Click here for bus time tables.](#)

[Click here for train table](#), Copenhagen airport to Växjö railway station. (Remark: copy "Københavns Lufthavn/Kastrup" and "Växjö Station" and paste into in the fields From and To, respectively.)

Other useful information

[Map of Linnaeus University in Växjö](#)

[Map of Växjö](#) (in Swedish)

[Växjö Tourist Office](#)

[Sweden's Museum of Glass](#) (in Swedish)

[The Kingdom of Crystal](#)

[The weather forecast for Växjö](#) (select "Växjö" in the drop down menu and click the arrow button)

Conference dinner

The participants of the conference are welcome to attend the conference dinner on the evening of Monday, June 27. The expenses are covered by the conference fee.

Registration

In order to register for the workshop, please contact Astrid Hilbert at Linnaeus University by e-mail astrid.hilbert@lnu.se.

The conference fee of SEK 600 for external participants covers the expenses for the conference dinner and all beverages.