



NEWSLETTER

No. 11

6 November 2014

**Humboldt-Universität zu Berlin
Collaborative Research Center 649
Spandauer Straße 1
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REGULAR RESEARCH SEMINARS

An overview is available at:

<http://sfb649.wiwi.hu-berlin.de/fedc/seminars.php>**ECONOMIC RISK SEMINAR**

Location: Spandauer Str. 1, room 23
 Time: every Monday, 2.00 – 4.00 p.m.

10 November 2014

Melanie Schienle

Leibniz Universität Hannover
 "Systemic Risk Spillovers in the European Banking"

26 November 2014

Martin Wagner

TU Dortmund
 "Integrated Modified OLS Estimation and Fixed-b Inference for Cointegrating Regressions"

SCHUMPETER SEMINAR

Location: Spandauer Str. 1, room 23
 Time: every Tuesday, 4.00 – 6.00 p.m.

04 November 2014

Viktor Lavy

University of Warwick
 "On The Origins of the Gender Human Capital Gap: Short and Long Term Effect of Teachers' Stereotypes."

11 November 2014

Kartik Anand

Bank of Canada
 "Global stores of value and the international role of the renminbi."

04 November 2014

Alexander Ludwig

Goethe Universität Frankfurt am Main
 "Social Security and the Interactions Between Aggregate and Idiosyncratic Risk."

WIAS RESEARCH SEMINAR MATHEMATICAL STATISTICS

Location: Weierstrass Institute for Applied Analysis and Stochastics,
 Mohrenstraße 39, 10117 Berlin, Erhard-Schmidt-Hörsaal
 Time: every Wednesday, 10.00 – 12.00 a.m.

04 November 2014

Efang Kong

University of Kent
 "Methods of dimension reduction"

CURRENT EVENTS

More information can be found here:

http://sfb649.wiwi.hu-berlin.de/fedc/events_actual.php

19 November 2014

Jour fixe fall 2014

Location: CRC649, HU Berlin
Time: 14.00 – 17.00 p.m.

20 to 21 Nov. 2014

Workshop on Recent Advances in High-Frequency Statistics

Location: WIAS, Berlin
Time: 20.10: 13.30 – 18.00 p.m.
21.10: 09.15 – 16.00 p.m.

NEWS OF THE CRC



06 to 08 Oct. 2014

Humboldt-Aarhus-Xiamen workshop

From the 6th until the 8th of October the Humboldt-Aarhus-Xiamen workshop 2014 took place in Berlin. After three similar preceding meetings in recent years between Humboldt and Xiamen University from China it was the first time that researchers from Aarhus in Denmark joined the meeting. Spread over three days, 25 speakers from diverse fields such as statistics, econometrics, macroeconomics and mathematics gave talks in the representative Emperor hall of the law faculty at Unter den Linden in Berlin.

Among the speakers were well-known researchers such as Jin-Chuan Duan from the University of Singapore, whose talk about CDS pricing marked the starting point of the scientific program. Talks from experienced researchers of the three participating universities followed. The topics ranged from highly topical practical questions in economic applications to deep mathematical analyses of asymptotic properties of experiments. To name some examples there were talks about economic risk for tail events, change point detection and volatility estimation as well as employers' age and gender preferences. Bringing together researchers from dif-

ferent areas allowed very fruitful and interesting discussions after the talks and between the sessions. Additionally the conference gave a selection of young researchers from the IRTG 1792 the chance to present their PhD topics to a renowned audience.

Besides the insightful sessions there was enough time to sit down with some coffee and cake to get to know each other better. This opportunity was also gladly used by the participants to continue the discussion about research topics of special interest to them in more detail. The come together of different cultures was also mirrored by the food offered for the participants. During the lunch times a delicious Chinese buffet satisfied every wish whereas the conference dinner took place in a wine cellar at the Bavarian restaurant Weihenstephan leading to a merry atmosphere.

We keep this workshop in good memory and thank the IRTG students for their great organization of this event.



NEWS OF THE PROJECTS

Roland Strausz (A8) participated in the CESifo Area Conference on Energy and Climate Economics in Munich, 17th to 18th of October 2014, and presented his paper on "The Effectiveness of Taxation and Teed-in Tariffs" co-authored with Fabio Antoniou.

Suvi Vasama (A8) participated in the Alhambra meets Barcelona from 16th to 17th of October, presenting the paper Cognitive Bubbles, which is joint work with Thomas Meissner and Antoni Bosch-Domenech. She visited Stern School of Business, New York University, from 22th of August to 3rd of October.

Ulrich Horst (A11) visited the Newton Institute for Mathematical Sciences at Cambridge University from 23rd of September to 10th of October. During his visit he gave a mini course on Stochastic Control Problems arising in Models of Optimal Portfolio Liquidation on Oct 1 and attended the workshops on Monitoring Systemic Risk: Data, Models and Metrics (22nd to 26th of September) and the Mini Workshop on Kinetic Models and Mean Field Games in Finance (8th of October).

Wolfgang Härdle (B1) gave several talks at Universities in the People's Republic of China: Fudan Uni Shanghai on "DYTEC – DYnamic Tail Event Curves", 11th of October; Suzhou University on "TEDAS – Tail Event Driven ASset allocation", 14th of October, and on "DYTEC – DYnamic Tail Event Curves", 15th of October; Xiamen University on "TEDRIS – Tail Event Driven Risc Structures", 19th of October. On the 27th of October he has given a talk on "TEDRIS – Tail Event Driven Risc Structures" at the University of Vienna. At the workshop on high dimensional - high frequency time series, held at the Karlsruher Institut für Technologie KIT on the 30th of October, Professor Härdle has given a talk on "TENET - Tail Event driven NETWORK risk". He received an offer for a professorship on a chair of statistics of the Heriot Watt University in Edinburgh, United Kingdom.

Hizir Sofyan (B1), former CRC member, has become a Vice Rector of the Sistem Informasi Kepegawaian (Simpeg) at the Universitas Syiah Kuala (UNSYIAH) in Sumatra.

Frank Heinemann (C10) gave a keynote lecture at the Alhambra Experimental Workshop in Barcelona, 16th to 17th of October, and presented his paper "Bank reputation, Transparency and Cheap Talk as Substitutes for Commitment: Experimental Evidence."

Professor Lütkepohl (C15) visited the University of Regensburg on 13th of October 2014 and gave a seminar on "Structural Vector Autoregressions with Smooth Transition in Variances - The Interaction Between U.S. Monetary Policy and the Stock Market."

GUESTS OF THE CRC 649

You find a summary about all guests here:

http://sfb649.wiwi.hu-berlin.de/fedc/guests_actual.php

01.09.2014 – **Paulus, Michael**
31.01.2015 Charles University in Prague (CZ)

Project: International trade with specific concern about gravity models and role of institutions (e.g. corruption) in international trade, fiscal policies and macroeconomics, philosophy of economics

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22.09. – **Duan, Jin Juan**
08.11.2014 National University of Singapore (SG)

Project: Risk management, derivatives pricing and financial econometrics

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01.11. – **Yun-Cheng, Tsai**
29.02.2016 National Taiwan University (TW)

Project: *Composite Likelihood Method, Copula, Generalized Linear Models, Longitudinal Data Analysis, Missing Data, Statistical Computing, Spatial/Spatio-temporal Data Analysis, Time Series Analysis.*

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04.11. – **Kong, Efang**
06.11.2014 University of Kent (GB)

Project: *Methods of dimension reduction*

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NEW DISCUSSION PAPERS

- 2014-054** "Strategic Complementarities and Nominal Rigidities" by Philipp König, Alexander Meyer-Gohde
- 2014-055** "Estimating the Spot Covariation of Asset Prices – Statistical Theory and Empirical Evidence" by Markus Bibinger, Markus Reiss, Nikolaus Hautsch, Peter Malec
- 2014-056** "Monetary Policy Effects on Financial Intermediation via the Regulated and the Shadow Banking Systems" by Falk Mazelis
- 2014-057** "A Tale of Two Tails: Preferences of neutral third-parties in three-player ultimatum games" by Ciril Bosch-Rosa
- 2014-058** "Boiling the frog optimally: an experiment on survivor curve shapes and internet revenue" by Christina Aperjis, Ciril Bosch-Rosa, Daniel Friedman, Bernardo A. Huberman
- 2014-059** "Expectile Treatment Effects: An efficient alternative to compute the distribution of treatment effects" by Stephan Stahlschmidt, Matthias Eckardt, Wolfgang K. Härdle
- 2014-060** "Are US Inflation Expectations Re-Anchored?" by Dieter Nautz, Till Strohsal
- 2014-061** "Why the split of payroll taxation between firms and workers matters for macroeconomic stability" by Simon Voigts
- 2014-062** "Do Tax Cuts Increase Consumption? An Experimental Test of Ricardian Equivalence" by Thomas Meissner, Davud Rostam-Afschar

2014-063 "The Influence of Oil Price Shocks on China's Macro-economy : A Perspective of International Trade" by Shiyi Chen, Dengke Chen, Wolfgang K. Härdle

2014-064 "Whom are you talking with? An experiment on credibility and communication structure" by Gilles Grandjean, Marco Mantovani, Ana Mauleon, Vincent Vannetelbosch

PUBLICATIONS

Bibinger, M., Winkelmann, L. (2014)

"Econometrics of co-jumps in high-frequency data with noise"
Journal of Econometric
DOI: 10.1016/j.jeconom.2014.10.004

Ahrens, S. and Snower, D. J. (2014)

"Envy, Guilt, and the Phillips Curve"
Journal of Economic Behavior and Organization
DOI: 10.1016/j.jebo.2013.12.015

Strausz, R. and Schmidt, R. (2014)

"On the Timing of Climate Agreements"
Environmental and Resource Economics
DOI: 10.1007/s10640-014-9828-2

QUANTLETS

In October 34 new Quantlets were uploaded (a total of 411 Quantlets in 2014). More detailed information is available [here](#).

Project: PEC

Principal component analysis (PCA) is a widely used dimension reduction tool in the analysis of many kind of high-dimensional data. The mathematical idea of PCA is the decomposition of variation of a high dimensional object into uncorrelated factors or components. However in many applications, one is interested in capturing the tail variables of the data rather than variation around the mean. Such applications include weather related event curves, expected shortfalls, and speeding analysis among others. If we would like to study these high dimensional tail objects in a PCA fashion, the tail character requires the dimension reduction in an asymmetric norm rather than the classical L^2 -type orthogonal projection. The project PEC develops an analogue of PCA in an asymmetric norm. These norms cover both quantiles and expectiles, another tail event measure. Since there is no natural basis, no 'principal components', to the k -dimensional subspace found, PEC proposes two definitions of principal components and provides algorithms based on iterative least squares. PEC also proves upper bounds on their convergence times, and compares their performances in a simulation study.

The corresponding quantlets with R code can be found in the Project [PEC](#). The quantlet [China example](#) applies the algorithms to a Chinese weather dataset with a view to weather derivative pricing. The description of results and methodology can be found in the [SFB DP 2014-001 "Principal Component Analysis in an Asymmetric Norm"](#).

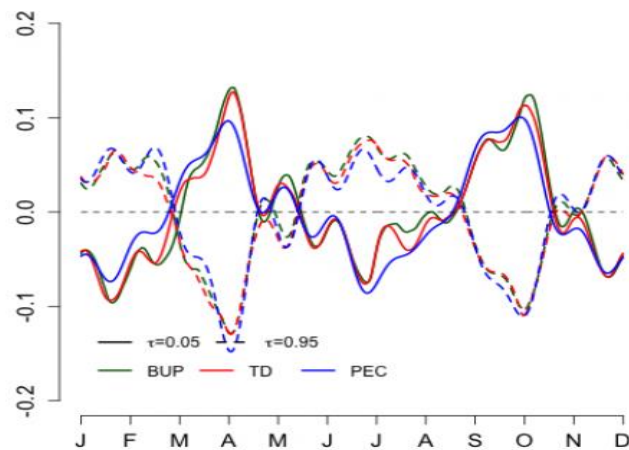


Figure 1. The estimated first component function for the residuals of temperature for Chinese data of the average temperatures from 1957 to 2009. Description: TopDown (TD), BottomUp (BUP), and PrincipalExpetile (PEC) components for the expectile levels 0.05 and 0.95)

QUOTE OF THE MONTH

"There cannot be a crisis next week. My schedule is already full."

Henry A. Kissinger (*1923)

Please also note that the newsletter is published on the homepage of the CRC 649.

**The CRC 649 – Newsletter is published at the beginning of each month.
 Editorial deadline for the tenth Newsletter 2014 is 29.09.2014.**