



## **Workshop on Dynamic Models driven by the Score of Predictive Likelihoods**

Organizers: Andrew Harvey (Cambridge), Siem Jan Koopman (VU), Andre Lucas (VU)

When: 17-18 January 2013 (1.5 day: Thursday afternoon and Friday)

Where: Tinbergen Institute Amsterdam

### *Background*

The idea of using score information from the predictive likelihood function to generate time-varying parameter paths in statistical models is now well established. Although many well-known dynamic models are effectively special cases of this general idea, new models have been formulated on the basis of this concept. The two groups on the forefront of these developments are coming together in this Workshop: Harvey and co-workers at the University of Cambridge, and Koopman, Lucas and co-workers at the VU University Amsterdam.

In this Workshop we want to present the ideas and further developments from the different perspectives but we also want to look for common grounds in these further developments. A series of short presentations will be delivered with sufficient time for discussion. We plan to let this Workshop provide an up-to-date overview of where we are with the score models.

Given the interests in this new research topic, we have been able to generate an international group of presenters, see the program below (everyone has confirmed their attendance).

We would like to invite our colleagues from the Tinbergen Institute and outside to attend our Workshop for both days. PhD students are also cordially invited !

Andrew Harvey -- Siem Jan Koopman -- Andre Lucas

## Dynamic Models driven by the Score of Predictive Likelihoods

### *Program*

Each regular presentation is in total 30 minutes : 20 minutes presentation and 10 minutes discussion  
Keynote opening and closure presentations of Creal and Harvey are 45=35+10 minutes.

### Thursday 17 January

- 14:10 Welcome Lucas / Koopman
- 14:15 Drew Creal (Booth Business School University of Chicago)  
*Latent dynamic factor models for mixed measurements*
- 15:00 Xin Zhang (Sveriges Riksbank, Central Bank of Sweden, Stockholm)  
*Measuring credit risk in a large banking system: econometric modeling and empirics*
- 15:30 *Tea/Coffee*
- 16:00 Pawel Janus (UBS Zurich)  
*A Dynamic Model for Daily Equity Covariances Based on Multiple Measures*
- 16:30 Philipp Andres (Cambridge U)  
*The Dynamic Location/Scale Model: with applications to intra-day financial data*
- 17:00 Ryoko Ito (Cambridge U)  
*Modeling dynamic diurnal patterns in high frequency financial data*
- 17:30 Closure Day 1
  
- 18:30 Walk from Weesperzijde to Noordermarkt: <http://www.amsterdamlightfestival.com/en/>
- 19:15 *Speakers dinner*

### Friday 18 January

- 10:00 Francisco Blasques (VU)  
*Consistency en asymptotic normality of maximum likelihood estimators of parameters in a class of observation-driven time series models*
- 10:30 Erkki Silde (VU)  
*Stationarity and ergodicity of new models for correlation dynamics*
- 11:00 *Tea/Coffee*
- 11:30 Bernd Schwaab (European Central Bank)  
*Conditional probabilities for Euro area sovereign default risk*
- 12:00 Kris Boudt (KU Leuven & VU)  
*Regime Switches in the Volatility and Correlation of Financial Institutions*
- 12:30 *Lunch*
- 13:30 Jiangyu Ji (VU)  
*A New Semiparametric Volatility Model*
- 14:00 Marcin Zamojski (VU) TBA
- 14:30 Siem Jan Koopman (VU)  
*Predicting time-varying parameters with parameter-driven and observation-driven models*
- 15:00 *Tea/Coffee*
- 15:30 Francesco Calvori (U Florence, Italy)  
*Parameter instability tests for alternative modeling frameworks*
- 16:00 Stephen Thiele (Cambridge U)  
*Time-varying parameters*
- 16:30 Andrew Harvey (Cambridge U)  
*Filtering with heavy tails*
- 17:15 Closure by Andre Lucas (VU)
- 17:30 *Farewell Drinks*

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