The SoFiE Financial Econometrics Summer School in North America took place at the Kellogg School of Management, Northwestern University, from Monday July 24 through Friday July 28, 2017. Participants from over 50 institutions and 20 countries attended this year’s conference. Topics that were covered:

- Introduction to High-Frequency Return Measures;
- Introduction to Continuous Time Asset Pricing;
- The Pricing of Smooth Payoffs with Applications to Return Variation Measures;
- Nonparametric Tail Risk Measures;
- Exploring Empirical Issues in Financial Economics via Corridor Volatility;
- Nonparametric Option-Based Estimation of Semimartingale Characteristics;
- Econometrics of Parametric Option Pricing Models under Alternative Asymptotic Settings;
- The Global Pricing of Tail Risk and the Equity Risk Premium;
- Numerical Option Pricing Techniques (including alternative Fourier Inversion Methods).

Lecturers:
Professor Torben G. Andersen (Kellogg School, Northwestern University)
Professor Viktor Todorov (Kellogg School, Northwestern University)
Nicola Fusari (Johns Hopkins University)

Guest Speakers:
Bluford Putnam (CME Group)
Kevin Davitt (CBOE)
Monday, July 24, 2017 – Kellogg Global Hub, Room L110

12:00 p.m. – 1:30 p.m.  Lunch and Registration

1:30 p.m. – 4:45 p.m.  Afternoon Lectures, Torben Andersen and Viktor Todorov:
“The Econometrics of Financial Market Volatility: An Introduction to
High-Frequency Based Measures”
“Introductory Notes: Continuous-Time Asset Pricing, High
Frequency Risk Measures, and Changes of Measures and Pricing
Kernels”

5:00 p.m. – 7:00 p.m.  Welcome Reception, Room 5101

Tuesday, July 25, 2017 – Kellogg Global Hub, Room L110

8:00 a.m. – 8:30 a.m.  Breakfast

8:30 a.m. – 11:30 a.m.  Morning Lectures, Torben Andersen and Viktor Todorov:
“The Pricing of Smooth Payoffs with Applications of Return Variation”
“Tails, Fears and Risk Premia”
“Tail Risk, Volatility and Return Predictability”

11:30 a.m. – 2:00 p.m.  CME Lunch and Presentation, White Auditorium, 2nd Floor
Special Presenter: Bluford Putnam – CME Group
“Probability Analytics and Transaction Costs in the Era of Event Risk”

2:30 p.m. – 5:00 p.m.  Afternoon Participant Presentations:
“Ambiguity, Volatility, and Credit Risk” – Patrick Augustin
“How Important are Inflation Expectations for the Nominal Yield
Curve” – Roberto Gomez Cram
“Simulation-based Term Structure Estimation with Application to Volatility-induced Stationary Models” – Anne Lundgaard Hansen
“The Leverage Effect and the Variance Risk Premium” – Guanglian Hu
“Idiosyncratic Volatility, its Expected Variation, and the Cross-Section of Stock Returns” – T. Frederik Middelhoff
“Crash Risks in Individual Stocks” – Paola Pederzoli

Wednesday, July 26, 2017 – Kellogg Global Hub, Room L110

8:30 a.m. – 9:00 a.m.  Breakfast
9:00 a.m. – 12:15 p.m.  Morning Lectures, Torben Andersen and Viktor Todorov
“Exploring Important Empirical Issues in Financial Economics via Corridor Volatility”
“Nonparametric Option-Implied Volatility and Nonparametric Implied Levy Density”

12:30 p.m. – 1:30 p.m.  Lunch

2:00 p.m. – 5:00 p.m.  Afternoon Participant Presentations:
“High Frequency Risk Neutral Moments and Risk Discovery in European Banks” – Yoichi Otsubo
“Estimation of Integrated Quadratic Covariation with Endogenous Sampling Times” – Yoann Potiron
“The Information Content of High Dimensional Option Implied Average Correlations: Evidence from High Frequency Option Panel” – Yang Zhang
“Testing for common factors in large factor models” – Yinchu Zhu
“Model-Free Approaches to Discern Non-Stationary Market Microstructure Noise and Time-Varying Liquidity” – Richard Chen

5:00 p.m. – 7:00 p.m.  Conference Dinner, Global Hub Market Place, 1st Floor

Thursday, July 27, 2017 – CBOE Conference Room

7:00 a.m.  Meet at Global Hub Front Entrance for Shuttle Service Downtown
8:30 a.m.  Check-In at CBOE
8:45 a.m. – 12:00 p.m.  Morning Lectures, Torben Andersen and Viktor Todorov:
“The Global Pricing of Tail Risk and the Equity Risk Premium”
“Parametric Inference and Dynamic State Recovery from Option Panels”
“Unified Inference for Nonlinear Latent Factor Models from Panels with Fixed and Large Time Span”

12:00 p.m. – 2:00 p.m.  Lunch, CBOE Presentation and Trading Floor Visit

2:00 p.m. – 4:30 p.m.  Afternoon Lecture, Kevin Davitt (CBOE):
“Econometrics of Derivatives”

Afternoon Participant Presentations:
“Forecasting the Implied Volatility Structure” – Xun Gong
“The Volatility of Volatility Term Structure” – Hendrik Huelsbusch
“Forward Looking Tail Risk Measures” – Markus Huggenberger
“Transient and Persistent Factor Structure in Equity Options” – Hamed Ghanbari

5:30 p.m. – 7:00 p.m.  Architecture River Cruise, Chicago Architecture Foundation
Riverside Gardens, Chicago Riverwalk at Michigan Ave, 112 E Wacker Dr, 60601

Friday, July 28, 2017 – Kellogg Global Hub, Room L110

8:30 a.m. – 9:00 a.m.  Breakfast

9:00 a.m. – 12:15 p.m.  Morning Lectures, Nicola Fusari:
“An ‘Informal & Partial’ Overview on Option Pricing”

12:15 p.m. – 1:30 p.m.  Lunch

Lecturers:
Professor Torben G. Andersen (Kellogg School, Northwestern University)
Professor Viktor Todorov (Kellogg School, Northwestern University)
Nicola Fusari (Johns Hopkins University)

Guest Speakers:
Bluford Putnam (CME Group)
Kevin Davitt (CBOE)