HPCFinance

**Luca Capriotti,**
Credit Suisse

"AAD and PDEs: Real Time Risk Management of Callable products"

**Erik Vynckier,**
AllianceBernstein

"Big Data for Smart Beta"

**David Simmons,**
Willis Re

"How Catasprophe and Financial Modelling Revolutionised the Insurance Industry"

# 14 –15 March 2016

Aberdeen Asset Management / Auditorium
Bow Bells House, 1 Bread Street, EC4M 9HH
City of London

**Mike Giles,**
University of Oxford

"Multilevel Monte Carlo methods for Finance"

**Matthew Lightwood,**
Conning Asset Management

"Strategic Asset Allocation for Insurance Companies under Solvency II - From Model Specification to End Results"

**Peter M. Phillips,**
Aon Benfield

"The Push for Big Compute Forecasting in the Insurance Industry"

## Final Conference hosted by Aberdeen Asset Management

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**HPCFinance**, EU-funded network founded in 2012, aims to improve and strengthen the European financial industry. The network stands at the crossroads of Financial Engineering and High Performance Computing, providing robust solutions to managing financial risks.

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# Final Conference hosted by Aberdeen Asset Management
# High Performance Computing in Finance

**Aberdeen Asset Management / Auditorium,**
**Bow Bells House, 1 Bread Street, EC4M 9HH**
**City of London**

## Monday 14th of March 2016

9:00 Registration & coffee

**09:30** **Opening words professor Juho Kanniainen, HPCFinance Coordinator**
(Tampere University of Technology)

**09:35** **Erik Vynckier, Chief Investment Officer (AllianceBernstein):** *High Performance Computing & Big Data for Finance. Identifying Returns, Managing Risk and Reporting with Transparency*

**10:15** **Hassan Jawaid (Aarhus University):**
A unified risk minimization framework

10:45 Coffee break

**11:15** **Andrea Barletta (Aarhus University):**
Consistent modeling and efficient pricing of VIX options

**11:45** **Camilla Pisani (Aarhus University):**
Methods for modelling and calibrating to volatility surfaces for interest rates, equities, credit, and foreign exchange

12:15 Lunch break

**13:30** **David Simmons, Managing director (Capital, Science and Policy Practice / Willis Re):**
*How Catastrophe and Financial Modelling Revolutionised the Insurance Industry*

**14:15** **Philipp Ustinov (CSA):**
Yield curve modelling in a low rate environment

**14:45** **Igor Osmolovskiy (CSA):**
Individual Household Financial Planning

15:15 Coffee break

**15:45** **Professor Mike Giles (University of Oxford):**
*Multilevel Monte Carlo methods for finance*

**16:30** **Grigorios Papamanousakis (Aberdeen Asset Management):**
Multi-level Stochastic Valuations

**17:00** **Ye Yue (Tampere University of Technology):**
News Impact on Variance Term Structure and Jumps

**17:30** **Hanxue Yang (Tampere University of Technology):**
Financial models, volatility risk, and Bayesian algorithms

18:00 Closing remarks

## Tuesday 15th of March 2016

09:00 Registration & Coffee

**09:30** **Dr. Luca Capriotti, Managing Director (Credit Suisse):**
*AAD and PDEs: Real Time Risk Management of Callable products*

**10:15** **Binghuan Lin (Techila Technologies):**
Distributed computing in finance

10:45 Coffee break

**11:15** **Kossi Kouma Gnameho (Maastricht University):**
Numerical Solutions of Backward SDEs

**11:45** **Grzesiek Kozikowski (The University of Manchester):**
Selection and implementation of high-performance platforms in finance: The end-user's point of view

12:15 Lunch break

**13:30** **Peter M. Phillips, President (Pathwise Solutions Group / Aon Benfield):**
*The Push for Big Compute Forecasting in the Insurance Industry*

**14:15** **Ahmad Salahnejhad Ghalehjooghi (Maastricht University):**
Time-Consistent & Market-Consistent Actuarial Valuations

14:45 Coffee break

**15:15** **Jun Hu (Tampere University of Technology):**
Efficient numerical methods on high-performance computing platforms for the underlying financial models

**15:45** **Jinzhe Yang (Aberdeen Asset Management):**
Real-time operation of financial risk models for hedging asset and liability exposure

**16:15** **Dr. Matthew Lightwood, Vice President (Risk & Capital Management Solutions / Conning Asset Management):**
*Strategic Asset Allocation for Insurance Companies under Solvency II - From Model Specification to End Result*

17:00 Closing remarks