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

ERIK VYNCKIER

Erik Vynckier joined AllianceBernstein as Chief Investment Officer, Insurance (EMEA) in September 2013. He is responsible for developing and implementing asset management solutions to support the investment, capital management and product development ambitions of insurers.

Before joining AllianceBernstein, Erik managed with-profits and annuity funds at Scottish Widows Investment Partnership, improving risk/return with novel assets and derivatives overlays. Earlier, he managed the Group Risk Hub of Standard Life, hedging equity, interest rate and currency risks of with-profits and variable annuities to secure the balance sheet. Before that, Erik worked at investment banks Credit Suisse First Boston and HSBC, in equity program trading, quantitative development and pension fund and insurance asset-liability management. Prior to his MBA, Erik held R&D, production and strategy positions in the petrochemical industry in France, Belgium, Germany, the United States and the United Kingdom. He has also founded and served as board member of www.hpcfinance.eu, the European initiative on high performance computing in Finance.

Erik graduated as Chemical Engineer at Universiteit Gent (Belgium) and completed his MBA at London Business School in 2000.

DAVID SIMMONS

David is a Managing Director within the Willis Re Capital, Science and Policy Practice. David has over 30 year's re/insurance experience. He was a pioneer of insurance financial and peril modelling and is a regular conference speaker. He has a mathematics degree from Bristol University and is a Fellow of the Chartered Insurance Institute, was a national property insurance prize-winner and is a Vice-President of the London Insurance Institute. He has recently been elected a Fellow of the Institute of Mathematics and its Applications. Recent work had focused upon developing country catastrophe risk, for example designing and placing reinsurance for the African Risk Capacity which provides drought insurance to African governments.

MIKE GILES

Mike Giles is Professor of Scientific Computing in the Oxford University Mathematical Institute. He is also a founding member of the Oxford-Man Institute of Quantitative Finance, and an Associate Director of the Oxford eResearch Center (OeRC).

After studying Maths at Cambridge and then doing a PhD in Aeronautical Engineering at MIT, he worked for many years on computational fluid dynamics for aero-engine analysis and design. In the last 10 years, he switched fields to computational finance, and in particular stochastic numerical methods. This has included the use of adjoint methods for computing Greeks, and multilevel Monte Carlo methods for improved computational efficiency. Through OeRC, he also has interests in the use of GPUs for High Performance Computing in finance and other areas.

Tuesday 15th of March 2016

LUCA CAPRIOTTI

Luca Capriotti is a Managing Director at Credit Suisse, based in London, where he works in Quantitative Strategies and he is responsible for Credit Products in Europe, and globally for Corporate Bank and Treasury. He is currently focusing on modeling in the areas of Flow and Structured Credit, Algo trading, Risk Management of a Bank's own credit, Contingent Convertibles pricing and Risk Management, Risk Weighted Assets reduction strategies and Counterparty Credit Risk Management. Previous to this role, he was US head of Quantitative Strategies Global Credit Products, he has worked in Credit and Commodities Exotics in New York and London and in the cross-asset modeling R&D group of GMAG in the London office.

Luca is also visiting professor at the Department of Mathematics at University College London. His current research interests are in the field of Credit Models and Computational Finance, with a focus on efficient numerical techniques for Derivatives Pricing and Risk Management, and applications of Adjoint Algorithmic Differentiation (AAD) for which he holds a US Patent. Luca gives regularly gives seminars and courses worldwide. He has served as supervisor and external examiner for Master and PhD programs and as referee for several scientific publications including Physical Review B, Physical Review Letters, Quantitative Finance, Finance and Stochastics, Algorithmic Finance, Wilmott Magazine, Journal of Computational Finance, Journal of Risk, and Risk Magazine.

Prior to working in Finance, Luca was a researcher at the Kavli Institute for Theoretical Physics, Santa Barbara, California, working in the field of High Temperature Superconductivity and Quantum Monte Carlo methods for Condensed Matter systems. Luca has been awarded the Director's fellowship at Los Alamos National Laboratory, the Wigner Fellowship at Oak Ridge National Laboratory, and he has published over 60 scientific papers, with the top 2 papers collecting to date over 500 citations (h factor 21). Luca holds a M.S. cum laude in General Physics from University of Florence (1996), and an M.Phil. and Ph.D. cum laude in Condensed Matter Theory, from the International School for Advanced Studies, Trieste (2000).

PETER M. PHILLIPS

Since 1997 Peter has developed an international track record of designing, implementing and managing effective variable annuity hedge programs and valuation solutions. Peter has over 25 years of derivative trading, modeling and risk management experience in the banking and insurance industries.

The PathWise Solutions Group at Aon Benfield provides clients with investment advisory and consulting services, and software. PathWise is an award winning integrated high performance computing business solution to model, price, value, report and manage complex financial guarantee risk embedded in life insurance products. It is offered to clients either as a Software-as-a-Service solution in the cloud or as an on-premise software solution where the client is responsible for the installation and administration PathWise system.

Peter obtained an honors MBA from the University of Chicago, and a Msc in Finance from the London School of Economics, as well an honors Bachelor of Commerce and Economics from the University of Toronto. Peter holds Series 7, 24, 66, 79, 3 and 4 registrations with Aon Securities, Inc.

MATTHEW LIGHTWOOD

Matthew Lightwood, Ph.D, BSC (HONS), is a Director at Conning where he is responsible for quantitative modelling and providing technical expertise in economic modelling to support both prospective and existing clients using the GEMS® Economic Scenario Generator. Prior to joining Conning in 2009, he was employed as a Senior Risk Consultant, where he was responsible for financial modelling as well as managing and implementing large professional services projects for financial clients. Matthew is a graduate of the University of Manchester and University College London, where he earned a BSC (HONS) in Physics with Astrophysics and a Ph.D in High Energy Particle Physics.