



Invitation

Conference and Training Event on Computational Methods and Technologies for Finance

May 13-15, 2013, Sokos Hotel Ilves

and

May 16-17, Tampere University of Technology

Tampere, Finland

<http://www.hpcfinance.eu/networking-and-training-event-tampere>

HPCFinance has the pleasure to invite you to the Conference and Training Event on Computational Methods and Technologies for Finance. In addition to the HPCFinance partners and fellows, a select number of key industry leaders and academic scholars are joining us to share their insights and up-to-date technology and product developments. The event consists of a mini-conference taking place in the Sokos Hotel Ilves in Tampere between Mon 13th and Wed 15th of May 2013, followed by lectures and exercises between Thu 16th and Fri 17th at the Tampere University of Technology. You can choose to attend one or both of the components. To avoid disappointment, please RSVP as attendance is limited.

HPCFinance – a Marie Curie Initial Training Network of the European Union – hereby invites you to attend the *Networking and Training Event on High-Performance Computing in Finance*. The event will focus on computationally intensive financial problems solved by means of acceleration on novel high-performance computing platforms. This will be a valuable opportunity to network and expand your knowledge-base together with other experienced business leaders, scholars, as well as the HPCFinance network consisting of 7 universities and 8 companies, including investment and insurance companies, banks, consultants, software vendors and high-performance computing solution providers. There will be more than 20 leading speakers from the European computing and financial industry and academia including Microsoft Azure, Wayne Luk (Imperial College), Marc Vlietos (FINCAD), John Ashley (nVidia), Uwe Naumann (RWTH Aachen), Michael Dempster (Cambridge University), Mark Parsons (EPCC), Jacques du Toit (Numerical Algorithms Group), Terry Spitz (Citi) and many others.

The event, supported by the European Commission, is hosted by the Tampere University of Technology and Techila Technologies Ltd. Microsoft Corporation is kindly sponsoring the conference dinner. The event is free of charge for HPCFinance fellows and partners, as well as for the organizations speaking at the event. The cost of participation for external participants is 500 EUR for the conference (Mon-Wed) and 200 EUR for the lectures (Thu-Fri).

Registration

Participation is limited and we therefore accept registrations on a first-come, first-served basis. Please register no later than April 10, 2013: <http://www.hpcfinance.eu/registration-tampere-may-2013>.

For more information about HPCFinance network, please visit www.hpcfinance.eu or contact Prof. Juho Kanninen (HPCFinance Project Coordinator) through juho.kanninen@tut.fi. To see possible updates to the programme, please visit <http://www.hpcfinance.eu/networking-and-training-event-tampere>

Kind regards,

Juho Kanninen (TUT), Rainer Wehkamp (Techila Technologies Ltd) and Erik Vynckier (SWIP)



PROGRAM

 Will be updated, please visit <http://www.hpcfinance.eu/networking-and-training-event-tampere>

| Location | Sokos Hotel Ilves Monday, May 13 | Sokos Hotel Ilves Tuesday, May 14 | SokosHotel Ilves Wednesday, May 15 |
|-------------|--|--|---|
| 09:00-9:45 | | TITLE N.N. Calypto | PDE solution for Stochastic Local Volatility Models Zaid Haddou University of Manchester |
| 9:45-10:30 | | Optimising Risk Management Terry Spitz Citi | To be confirmed |
| Coffee | <i>Coffee and Registration</i> | | |
| 11:00-11:45 | Welcome, Juho Kanninen, TUT | Why the future is hybrid? Hicham Lahlou Xcelerit | Dynamic stochastic optimization with HPC Michael Dempster Cambridge University & CSA |
| | Finance & Risk - Why HPC? - Why now? Erik Vynckier Scottish Widows Investment Partnership - SWIP | | |
| 11:45-12:30 | Accelerating financial computation Wayne Luk Imperial College | Distributed Cloud Computing in Finance Rainer Wehkamp Techila Technologies | NAG for finance engineering John Holden Numerical Algorithms Group |
| Lunch | | | |
| 13:30-14:15 | Windows Azure Cloud Platform & Financial HPC N.N. Microsoft | GPUs and Parallelism in Computational Finance John Ashley nVidia | Adjoint Methods in Computational Finance Uwe Naumann RWTH Aachen |
| 14:15-15:00 | Dataflow Computing for Finance Craig Davies Maxeler | Variable Annuity Semi-Static Hedging Strategy Testing with HPC Peter M. Phillips AonBenfield | Interval Arithmetic and Automatic Differentiation in Optimisation and Model Calibration Grzegorz Kozikowski University of Manchester |
| Coffee | | | |
| 15:30-16:15 | Speeding up natural catastrophe models with HPC Hélène Galy Willis | GPU Computing for Derivative Pricing - Experience from a Vendor Thomas Weber SciComp | American Monte-Carlo for Portfolio CVA/PFE Alexandre Moralli Murex |
| 16:15-17:00 | Petascale to Exascale: the hardware and software challenge Mark Parsons EPCC | Scaling Financial Analytics from the Desktop to the Cloud Marc Vlitos FINCAD | Least-Squares Monte Carlo vs. Stochastic on Stochastic for Variable Annuities and Exotic Options with BS/Heston-CIR Georgios Dimitrakopoulos University of Manchester |
| | Coffee | Coffee | |
| 17:15-18:00 | Cloud Supercomputing - from 0 to 100 TFLOPS in one click Yuriy Guts Eleks | Computational Finance with MATLAB Sofia Mosesson MathWorks | |
| 19:00 | Event Dinner - Näsineula Tower Sponsored by Microsoft | | |

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PROGRAM Cont.

Will be updated, please visit <http://www.hpcfinance.eu/networking-and-training-event-tampere>

| Location | Tampere University of Technology Thursday, May 16 | | Tampere University of Technology Friday, May 17 |
|-------------|---|--|--|
| 09:00-9:45 | HPCFinance EU Project internal: Management and supervisory board meeting | Complementary training: negotiation skills Pentti Vanha-Aho TUT | HPC in the Cloud made easy: live demos and examples in Windows Azure Marko Koskinen Techila Technologies |
| 9:45-10:30 | HPCFinance EU Project internal: Management and supervisory board meeting | Complementary training: Tomi Nokelainen TUT | HPC in the Cloud made easy: Marko Koskinen Techila Technologies |
| Coffee | | | |
| 11:00-11:45 | HPCFinance EU Project internal: Management and supervisory board meeting | Introduction to OpenMP Jussi Heikonen CSC - IT Center for Science | Accelerate Financial Computations in MATLAB Daniel Armyr MathWorks |
| 11:45-12:30 | HPCFinance EU Project internal: Management and supervisory board meeting | Introduction to OpenMP Jussi Heikonen CSC - IT Center for Science | Accelerate Financial Computations in MATLAB Daniel Armyr MathWorks |
| Lunch | | | |
| 13:30-14:15 | Dataflow Computing, Hands-on Exercise Craig Davies Maxeler | | Code optimization: principles and examples Mats Aspnäs Åbo Academi |
| 14:15-15:00 | Dataflow Computing, Hands-on Exercise Craig Davies Maxeler | | Code optimization: principles and examples Mats Aspnäs Åbo Academi |
| Coffee | | | |
| 15:30-16:15 | GPU computing in finance - Local Volatility (Monte Carlo Jacques du Toit Numerical Algorithms Group | | |
| 16:15-17:00 | Algorithmic Differentiation Software and application to Uwe Naumann RWTH Aachen | | |

HOW TO GET THERE

How to get there (Tampere)

By Plane

The Tampere-Pirkkala airport connects Tampere with direct flights to/from Copenhagen (Blue1), Helsinki (Finnair), Riga (Air Baltic), and Stockholm-Arlanda (Blue1).

By Train

There are train connections between Helsinki and Tampere every half an hour during peak-hours, and every hour during the rest of the day. Travel time is between 1 hour and 30 minutes and 2 hours.

For more information: <http://www.vr.fi/en/index.html>

By Bus

There are convenient bus connections between the Helsinki Airport and Tampere. Buses leave directly in front of Terminal 2. Travel time is between 2 hours and 20 minutes and 4 hours.

For more information: <http://www.matkahuolto.fi/en/>

How to get there (Sokos Hotel Ilves)

Sokos Hotel Ilves is situated at the center of Tampere on walking distance from the train and bus main stations.

Address: Hatanpään valtatie 1

Tel. +358 20 1234 631

ilves.tampere@sokoshotels.fi

<http://www.sokoshotels.fi/en/hotels/tampere/ilves/>

How to get there (Tampere University of Technology)

The Tampere University of Technology (TUT) is situated 10km from the center of Tampere. City buses number 13, 20, 24, and 30 provide transport between the center of Tampere and TUT (around 30min).

Address: Korkeakoulunkatu 10

Tel. +358 3 3115 11

<http://www.tut.fi/en/visitors/index.htm>

The Sokos Hotel Ilves has agreed to provide a discount for the event-participants (102€/day for single standard room and 122€/day for double standard room). Special prices are valid until April 16th. You would simply need to mention "HPCFinance" when making the reservation.

Sokos Hotel Ilves

Address: Hatanpään valtatie 1

Tel. +358 20 1234 631

ilves.tampere@sokoshotels.fi

<http://www.sokoshotels.fi/en/hotels/tampere/ilves/>

The following hotels also provide accommodation in the center of Tampere (in alphabetical order):

Cumulus Koskikatu

Address: Koskikatu 5

Tel. +358 3 242 4111

koskikatu.cumulus@restel.fi

http://www.cumulus.fi/cumulus!/en_GB/

Holiday Inn Tampere

Address: Yliopistonkatu 44

Tel. +358 03 245 5111

tampere.holidayinn@restel.fi

http://www.finland.holidayinn.com/en_GB/

Hotel Victoria

Address: Itsenäisyydenkatu 1

Tel. +358 3 2425 111

sales@hotellivictoria.fi

<http://www.hotellivictoria.fi/english/index.html>

Scandic Tampere City

Address: Hämeenkatu 1

Tel. +358 3 244 6111

tamperecity@scandichotels.com

<http://www.scandichotels.com/Hotels/Countries/Finland/Tampere/Hotels/Scandic-Tampere-City/#.USOLo3cZ4kU>

Sokos Hotel Tammer

Address: Satakunnankatu 13

Tel. +358 20 1234 632

tammer.tampere@sokoshotels.fi

<http://www.sokoshotels.fi/en/hotels/tampere/tammer/>

