

Jyväskylä - Dynamic City in the Heart of Finland

Jyväskylä is a dynamic and lively city, which on the basis of its specializations promotes itself as the Human Technology City. The City of Jyväskylä is the seventh largest city in Finland with 131.000 residents. It is famous for its achievements in science and technology, its high-quality cultural activities and beautiful natural environment. Jyväskylä is also a very youthful city with almost 30.000 students.

Jyväskylä is a university city. It hosts one of the largest Finnish multidisciplinary universities with a total of seven faculties. University of Jyväskylä is a well-known international scientific center where students and scientists from all parts of the world work in a friendly and thoughts supporting atmosphere.

The Faculty of Information Technology is the first and largest IT faculty in Finland. Information Systems Science has been taught at the University of Jyväskylä since 1967. At the Department of Mathematical Information Technology, information technology is studied from the perspective of natural sciences. Here, studies are based upon strong knowledge in modern applied mathematics and participation in industrial projects. Special attention is also being given to research training in addition to both international and national co-operation.

Conference Secretariat

CM3 / Ms. Kati Valpe

Faculty of Information Technology
P.O.Box 35 (Agora)
FI-40014 University of Jyväskylä
Finland

Tel: +358 (0)400 247 458
Fax: +358 (0)14 260 2771

E-mail: CM3@jyu.fi
Web: www.jyu.fi/CM3



Location

CM3 will be hosted by the University of Jyväskylä, at the [Jyväskylä Congress Centre, Paviljonki](#), Lutakonaukio 12, FI-40101 Jyväskylä, Finland.

Submissions and Registration

Submissions and conference registration should be performed electronically via the conference web site: www.jyu.fi/CM3.

For each accepted paper at least one registration as presenting author is required. The presenting author must [register by April 30, 2015](#) to ensure the inclusion of the paper in the abstract book.



ECCOMAS
European Community on
Computational Methods in
Applied Sciences

CM3 – Computational Multi Physics, Multi Scales and Multi Big Data in Transport Modeling, Simulation and Optimization

Green Challenges in Automotive, Railways,
Aeronautics and Maritime Engineering

May 25–27, 2015, Jyväskylä, Finland



Organized by  UNIVERSITY OF JYVÄSKYLÄ

An Industry-oriented event

www.jyu.fi/CM3



Tentative Conference Programme

Updated March 12, 2015

Here are the first confirmed presentations.

Monday May 25, 2015

- » **Mårten Levenstam**, VOLVO CAR CORPORATION:
New trends in the automotive industry, transition from a mechanical industry to a software industry
- » Parallel Sessions
 - Mini-symposium
Prof. Victor Zakharov, University of St. Petersburg:
Emission reduction on road network
 - STS - Aeronautics
Dietrich Knoerzer, EC C-Aero2 project
- » **Mikael Törmänen**, VOLVO CAR CORPORATION:
Challenges in Optimizing a Passenger Vehicle Automotive
- » **Prof. Adel Abbas**, Universidad Politécnica de Madrid-UPM:
Multidisciplinary Design Analysis/Optimisation System Needs and Development
- » Parallel Sessions
 - Mini-symposium
Prof. Boris Chetverushkin, President of ONIV:
Mathematical simulation of traffic flows
 - STS - Maritime
Sustainable and Innovative concepts to combine marine transport and emerging marine activities
J. Brito: *Challenges to develop innovative multi-use offshore platforms servicing marine transportation and emerging coastal activities.*
B. Galván: *Platea4D: A software platform for transnational maritime and coastal projects*
- » Welcome reception



Tuesday May 26, 2015

- » **Prof. Régis Cottureau**, Laboratoire MSSMat, ECP:
Large-scale wave propagation in ballasted railway tracks
- » **Prof. Mikael Rönqvist**, University of Laval:
Collaborative logistics – possibilities and challenges
- » **Prof. Wout Dullaert**, VU University:
Extending the Scope of SCM Decision Making
- » **Prof. Olli Bräysy**, University of Jyväskylä:
The key success factors in future logistics.
- » **Matteo Pozzi**, OPTIT:
Optimization of large-scale waste flow management at HerAmbiente
- » **Peter Grankulla**, Attracs/Ahola Group:
Dynamic and Real-time Management of Logistic Chains
- » **Ilkka Hämäläinen**, Edicon:
Challenging Science for Innovations in Logistics
- » **Jeroen Bliemer**, CapGemini Consulting:
The role of new industry 4.0 technologies in logistics
- » **15:00-16:00 Limowa Roundtable** (J. Kasvi, O. Bräysy, M. Rönqvist, G. Hasle)
- » CM3 roundtable
- » Software demo session
- » Conference dinner

Wednesday May 27, 2015

- » **11:00-12:00 Limowa Roundtable** (W. Dullaert, H. Fleuren, J. Särelä, J. Viinikainen)
- » **Prof. Hein Fleuren**, Bluerock Logistics:
How TNT Express saved more than 200 million in four years' time by using Business Analytics
- » **Juha Särelä**, Fimatic:
Development of intra-logistics from the viewpoint of material flow management
- » **Jarno Väisänen**, Procomp Solutions:
Towards better health care via new concepts and planning methods
- » **Kimmo Rahkamo**, Fennia Rail:
Changing Finnish Rail Market
- » **Prof. Geir Hasle**, SINTEF:
Dynamic transportation planning – Challenges and new opportunities
- » **Kyösti Orre**, General Industry Federation:
Digital Supply Chains
- » Parallel Sessions
 - **Teemu Mustonen**, Ecomond:
Towards more efficient logistics by using computational technology and intelligent information systems

ECCOMAS Thematic Conference

CM3 is the 1st of the series of ECCOMAS Thematic Conferences organized by the ECCOMAS Industrial Interest Group (IIG).

ECCOMAS is the European Community on Computational Methods in Applied Sciences. Further information can be found: www.eccomas.org.

Call for MS and STS

For organizing a Mini-symposium session or an STS session, please send a small description about the topics and the title of the session to cm3@jyu.fi by March 30. Tell us also which authors should/will participate to your MS/STS. Authors will submit their abstracts normally using the Abstract submission system.

Important Dates

Deadline for presenting a one to four pages abstract	March 31, 2015
Decision on the acceptance	April 15, 2015
Deadline for registration to have the paper included into the abstract book	April 30, 2015
The CM3 Conference	May 25–27, 2015

The selected papers to be submitted by August 15, 2015 will follow a peer review process and will be published tentatively by Springer-ECCOMAS.

The conference participants willing to contribute to this book have to submit an abstract to the conference organizers during the conference.

Registration

Group	Registration Fees
Delegates	450 €
Students	450 €
Company (1st delegate)	450 €
Company (next delegates)	225 €
Participation for one day	300 €

Registration should be performed electronically via the conference web site: www.jyu.fi/CM3.

The fees will include:

- » Conference Proceedings
- » Attendance at all scientific sessions
- » Lunch and coffee breaks, welcome reception and conference dinner