

CONFERENCE PUBLICATIONS

The **Conference Contributions** will be published in two volumes available at the beginning of the conference:

- Volume 1 / Printed Abstract Volume with one page abstracts of each contribution
- Volume 2 / USB flash drive Volume with full version of each contribution (6 pages, Student Contributions 4-6 pages)

Full papers are under consideration for Special issues of **MCMDS - Mathematical and Computer Modelling of Dynamical Systems** and other journals in modelling and simulation.

Proceedings can be published on the Publication server IFAC-Online after the conference.

Details can be found at the conference website www.mathmod.at.

SUBMISSION of CONTRIBUTIONS

Authors are invited to submit a *Review Abstract* of their contribution via conference website www.mathmod.at

Deadlines MATHMOD Contribution

Submission Review Abstract	Nov. 11, 2011
Notification of Acceptance	Dec. 15, 2011
Full Paper and Proc. Abstract	Dec. 31, 2011

Deadlines MATHMOD Work-in-Progress and Student Contribution

Submission Review Abstract	Dec. 1, 2011
Notification of Acceptance	Dec. 20, 2011
Proceedings Abstract	Jan. 10, 2012

Submissions of abstracts and papers, registration, payment, info request, etc. are managed by the web-based conference administration system ConfTool, accessible at the MATHMOD Conference website.

CONFERENCE FEES

Regular Fee	€ 400.-
Reduced Fee (members of (co)-sponsoring societies)	€ 350.-
Students	€ 150.-
Accompanying Persons	€ 100.-

Accommodation: Organised by local travel agency. For information and reservation please visit the website www.wien.info/en

DATE and PLACE

Vienna University of Technology,
Freihaus Building,
Wiedner Hauptstraße 8-10, A-1040 Vienna

February 13-14, 2012
ASIM-Workshop and MATHMOD-Tutorials

February 15-17, 2012
All Sessions

INFORMATION

For more information please visit the conference website www.mathmod.at or contact the conference chair:

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7th MATHMOD Vienna

7th Vienna International Conference on Mathematical Modelling

February 15 – 17, 2012
Vienna University of Technology



ÖMG



VDI
VDE
GMA

SCOPE

The scope of the conference covers theoretic and applied aspects of the various types of mathematical i.e. formal modelling for systems of dynamic nature (deterministic, stochastic, continuous, discrete or hybrid, etc.). The conference will also deal with alternative modelling methods (e.g. cellular automata) and modelling for / in scientific computing.

The topics to be discussed will include e.g.

- modelling theory
- processes and methods for model formulation, identification, development, reduction and validation
- automation of modelling and software aids for modelling
- computer modelling and modelling for /by simulation
- qualitative modelling including fuzzy and iterative approaches to modelling
- modular modelling and interdisciplinary modelling
- learning networks / uncertainties in modelling
- methodologies for model validation
- fitting mathematical models to real processes
- relationship between the modelling approach and problem solutions
- comparison of methods for modelling, model reduction and model validation
- effects of modelling errors on overall performance of an engineering system
- applications in the field of engineering systems and in natural sciences
- applications in other fields (such as environmental systems, biotechnology, etc.)
- case studies of comparisons for ideas or methods
- education in modelling
- modelling aspects in scientific computing
- fractional calculus

PROGRAMME

The **Scientific Programme** will consist of

- Plenary Lectures
- MATHMOD Contributions
- MATHMOD Work-in-Progress Contributions
- MATHMOD Student Contributions
- MATHMOD Minisymposia.

The **Plenary Lectures** will deal with Mathematical Modelling for Nonlinear Control, Continuous and Discrete Multidimensional Systems, Modelling of Structured systems, Model Reduction and Undermodelling, and Scientific Computing.

The **Social Programme** will include

- Welcome Party
- Cocktail Reception
- Heurigen Evening
- Art Exhibition
- Café Simulation

The **Programme for Accompanying Persons** will include the Social Programme and Guided Tours in Vienna.

SPONSORS / CO-SPONSORS

- Institute for Analysis and Scientific Computing at Vienna University of Technology
- Vienna University of Technology
- ARGESIM (Working Group Simulation News)
- ASIM (German Simulation Society)
- IFAC (Int. Fed. for Automatic Control)
- EUROSIM (Fed. of European Simulation Soc.)
- VDI/VDE - GMA, GAMM
- OCG – Austrian Computer Society
- ÖMG – Austrian Mathematical Society

ORGANISATION

Institute for Analysis and Scientific Computing at Vienna University of Technology

Programme Chair

I. Troch, Vienna University of Technology

Conference Chairs

F. Breitenecker, I. Troch

NOC

F. Breitenecker, U. Fitsch, A. Körner, I. Troch

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