



**9th Vienna International Conference  
on Mathematical Modelling  
February 21 – 23, 2018 at TU Wien**



**CONFERENCE CONTRIBUTIONS**

MATHMOD 2018 invites to submit contributions of following types:

- *MATHMOD Full Contribution*  
full paper review; publication in IFAC-PapersOnLine and in MATHMOD Abstract Preprint Volume; oral presentation in thematic sessions or minisymposium
  - *MATHMOD Discussion Contribution*  
abstract review; publication in MATHMOD Abstract Preprint Volume; short oral presentation with poster display or oral presentation in minisymposium
  - *MATHMOD Student Contribution*  
abstract review; publication in Abstract Preprint Volume; short oral presentation with poster display
- Submission of contributions is managed via IFAC's conference management system [ifac.papercept.net](http://ifac.papercept.net).

**Deadlines Full Contributions**

Submission Full Contribution	Sept.17, 2017
Notification of Acceptance	Jan. 12, 2018
Full Paper & Preprint Abstract	Jan. 26, 2018

**Deadlines Discussion / Student Contributions**

Submission Abstract	Nov. 5, 2017
Notification of Acceptance	Jan. 12, 2018
Preprint Abstract	Jan. 26, 2018

**CONFERENCE PUBLICATIONS**

The MATHMOD Conference Proceedings are published at IFAC-PapersOnLine (Full Contributions and Invited Contributions). A MATHMOD Abstract Preprint Volume with abstracts of all contribution types will be available at the conference (printed and electronic version).

Furthermore, following the IFAC copyright regulations, suitably adapted versions of MATHMOD Contributions which contain sufficiently new material may be sub-mitted to MCMDS, the Journal of Mathematical and Computer Modelling of Dynamical Systems, published by Taylor and Francis. More details will be published at the conference website.

**MATHMOD CONFERENCE FEES**

Regular Fee	€ 495.-	Student Fee	€ 220.-
Reduced Fee (members of (co)-sponsoring societies)	€ 445.-	Accompanying Persons	€ 145.-

**For registration and payment after Jan. 26<sup>th</sup> 2018 € 50,- are added.**

Registration for MATHMOD 2018 and administrative affairs are organised via MATHMOD website. Registration with regular (reduced) fee includes up to two submissions (of any type). Registration with student fee includes submission of one *Student Contribution* or one *Discussion Contribution*.

**SOCIAL PROGRAMM**

The Social Programme includes Welcome Party, Cocktail Reception, Heurigen Evening, Art Exhibition, Café Simulation and a Programme for Accompanying Persons includes all social events and guided tours in Vienna.

**ACCOMMODATION**

For information on possible accommodation and booking please visit the website [www.mathmod.at](http://www.mathmod.at).

**SPONSORS / CO-SPONSORS**

- Technische Universität Wien
- Automation and Control Institute and Institute for Analysis and Scientific Computing, TU Wien
- IFAC (Int. Federation of Automatic Control)
- ARGESIM (Working Group Simulation News)
- ASIM (German Simulation Society)
- EUROSIM (Fed. of European Simulation Soc.)
- GAMM (Int. Assoc. of Applied Math. and Mechanics)
- VDI/VDE – GMA (VDE Society Measurement and Automatic Control)
- OCG – Austrian Computer Society
- ÖMG – Austrian Mathematical Society
- OVE – Austrian Electrotechnical Association
- GMAR – Österreichische Gesellschaft für Mess-, Automatisierungs- und Robotertechnik

## SCOPE

The scope of *MATHMOD 2018* conference covers theoretic and applied aspects of various types of mathematical modelling (equations of various types, automata, Petri nets, bond graphs, qualitative and fuzzy models, etc.) for systems of dynamic nature (deterministic, stochastic, continuous, discrete or hybrid with respect to time, etc.).

The *topics* to be discussed include e.g.

- modelling theory; first-principles, identification, optimization, order reduction and validation
- automation of modelling and software tools
- computer modelling, modelling for/by simulation, co-simulation, modelling standards
- qualitative, modular, interdisciplinary modelling
- comparison of methods for modelling, alternative modelling methods (CAS, fuzzy, NN, QSS, etc.)
- model analysis and calibration, effects of modelling errors on overall performance of engineering systems
- applications in the field of engineering systems and in natural sciences
- applications in environmental systems, biotechnology, etc.
- applications in operation research, logistics and planning
- applications in medicine, physiology, health care and health systems
- education in/for/with modelling
- modelling aspects in scientific computing
- modelling for control and real-time applications
- machine learning, data analytics, big data

## PROGRAMME

The Scientific Programme consists of

- Sessions with Invited Plenary Contributions
- Thematic session with Full Contributions (oral presentations)
- Minisymposia with Full Contributions and Discussion Contributions (oral presentation)
- Short Presentation Sessions and Poster Display with Discussion Contributions and Student Contributions
- Tutorials / Exhibition for Methods, Tools and Software for Modelling and Simulation

## MATHMOD MINISYMPOSIA

Proven scientists in mathematical modelling are invited to organise MATHMOD Minisymposia. Organisers may invite contributions to a special theme of interest (Full Contributions or Discussion Contributions). Details for organisation of minisymposia can be found at MATHMOD website [www.mathmod.at](http://www.mathmod.at), deadline for suggestion of minisymposia is August 15, 2017.

## ORGANISATION

- Automation and Control Institute (ACIN)
- Inst. for Analysis and Scientific Computing (ASC)

## NATIONAL ORGANISATION TEAM

Andreas Körner (Chair)

Wolfgang Kemmetmüller (Co-Chair)

Stefanie Winkler (Conf. Ass.)

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