*August 31*

# Σ PRAGUE

*August 27* **2018**

# Waves in Flows
## Summer School and Workshop

**MAIN LECTURERS:**

*Adrian Constantin* - *Universität Wien, Austria*
*Denis Serre* - *Ecole Normale Supérieure de Lyon, France*
*Walter Craig* - *McMaster University, Hamilton, Canada*
*Manfred Kaltenbacher* - *Technischen Universität Wien, Austria*
*Vladimir Zeitlin* - *Université P. et M. Curie/Ecole Normale Superieure, Paris, France*
*Victor Shrira* – *University of Keele, United Kingdom*
*Vincent Rey* – *Université de Toulon, France*

**MAIN TOPICS:**

*Surface waves on fluids*
*Internal (gravity) waves*
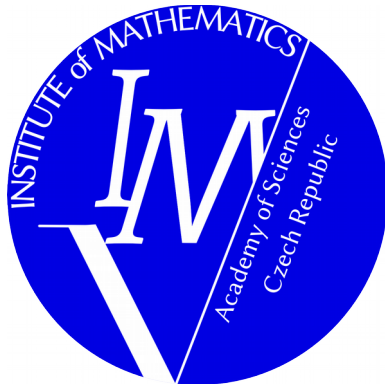*Hyperbolicity of wave phenomena*
*Shallow water and related models*
*Sound waves and acoustics*
*Numerical methods for waves in flows*
*Environmental applications*
*Biomedical applications*

**Academy of Sciences of the Czech Republic**
**Institute of Mathematics**

**Czech Technical University in Prague**
**Faculty of Mechanical Engineering**

**University of Pittsburgh**
**Swanson School of Engineering**

## *In association with the Nečas Center for Mathematical Modeling*

*WWW:* *http://**www.prague-sum.com***       *E-mail:* *support@prague-sum.com*

## Scope of the Event:

Waves are one of the most distinct and most important phenomena in fluid mechanics. The aim of this summer school is to present a comprehensive series of lectures on various aspects of waves and their role in mathematical analysis and numerical simulation of different types of flows. The summer school is organized as a multidisciplinary event with topics ranging from theoretical and numerical mathematics up to physics and applications. The emphasize will be on models related to topics originating in environmental, biomedical and industrial applications. The summer course is prepared for graduate students, young scientists, and other interested specialists. Besides of the course lectures, the program will include a one day workshop (on Wednesday, August 29) dedicated to short, more advanced lectures given by attending scientists.

## Course Location:

The whole course and workshop will be held at the Institute of Mathematics of the Academy of Sciences of Czech Republic.

*Institute of Mathematics, AS CR, Žitná 25, CZ - 115 67 Praha 1, Czech Republic*

## Registration Fees:

The registration fee covers course materials and refreshment during breaks. The accommodation and travel expenses are not covered.

|  | Early | Late |
|---|---|---|
| Student fee (whole course & workshop) | 280 € | 300 € |
| Full regular fee (whole course & workshop) | 360 € | 380 € |
| Limited fee (workshop only) | 180 € | 200 € |

*The early registration should be received before July 31, 2018.*

The fee should be paid by a bank transfer to the following account:
*IBAN:* CZ80 0710 0000 0000 6962 3011
*SWIFT:* CNBACZPP
*Bank Name:* Ceska narodni banka
*Bank Address:* Na Prikope 28, 115 03 Praha 1
*Account Holder:* Matematicky ustav AV CR, v.v.i.
*Variable Symbol:* (will be assigned during registration)
For other forms of payment contact the organizers.

## Support for Students and Young Scientists:

Few grants will be available for students and young scientists. Please only ask for this support if you can not attend the summer school without it and you have no other funds to use. Depending on the number of applicants the exact amount of support will be announced after the application deadline. The grant will cover at least the registration fee. Those participants who will benefit from the support will be asked to present a poster showing their own scientific work. *A formal application, containing short CV, motivation letter and recommendation letter, should be received by organizers before July 31, 2018.*

**For detailed information contact the course organizers:**

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*For further details and actual information see:*   http://**www.prague-sum.com**                    *ver. 2018-03-12*