Institute of Mathematics of the Academy of Sciences of Czech Republic and Czech Technical University in Prague, in association with the European Research Community on Flow, Turbulence and Combustion organize

Summer school and Workshop FSIforBIO 2011

Fluid-Structure Interaction for BIOmedical Applications

August 29 - September 2, 2011 - Prague, Czech Republic

The aim of the summer school is to present a comprehensive series of lectures on modern as well as classical problems related to fluid-structure interaction. The emphasize will be on mathematical, computational and experimental topics originating in biomedical 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 workshops (on Wednesday, August 31) dedicated to short, more advanced lectures given by attending scientists.

Invited lecturers:

Giovanni Paolo Galdi - University of Pittsburgh, USA
Antonio Fasano - University of Florence, Italy
Céline Grandmont - INRIA Paris-Rocquencourt, France
Suncica Canic - University of Houston, USA
Alessandro Veneziani - Emory University, Atlanta, USA
Matthieu Hillairet - Université Paul Sabatier, Toulouse, France
Mária Lukáčová - Johannes Gutenberg University, Mainz, Germany
Petr Sváček - Czech Technical University, Prague, Czech Republic

Main topics:

Topics in the mathematical theory of liquid-solid interaction Close-to-contact dynamics of solids inside a viscous fluid Data assimilation in cardiovascular mathematics Hyperbolic nets and networks in biomedicine Fluid-structure interaction problems in hemodynamics Mathematical models of blood clotting Modeling liquid and cells flow in tumor growth Mathematical modelling of glottal flow induced vibrations of human vocal folds

For detailed information contact the course organizers:



Šárka Nečasová Institute of Mathematics Academy of Sciences of Czech Republic matus@math.cas.cz



Tomáš Bodnár
Faculty of Mechanical Engineering
Czech Technical University in Prague
Tomas.Bodnar@fs.cvut.cz



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:

The participants should register as soon as possible by e-mail at : <u>Tomas.Bodnar@fs.cvut.cz</u> and <u>matus@math.cas.cz</u> <u>Registration fees:</u>

The registration fee covers course materials and small refreshment during the course breaks. The accommodation and travel expenses are not covered. The participants from Ercoftac member institutions can profit from a special 25% discount.

	Early	Late	Ercoftac
Student fee (whole course & workshop)	240 €	270 €	180 €
Full regular fee (whole course & workshop)	320 €	350 €	240 €
Limited fee (workshop only)	160 €	180 €	120 €

The early registration should be received before July 31, 2011.

Payment:

The registration fee should be paid preferably by a bank transfer to the following account:

Account Number: 6962 3011/0710 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 sent by e-mail after registration)

For other forms of payment contact the organizers.

Support for students and young scientists:

Thanks to Ercoftac, a limited number of grants will be available for European students and young scientists. 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 <u>before July 31, 2011</u>.