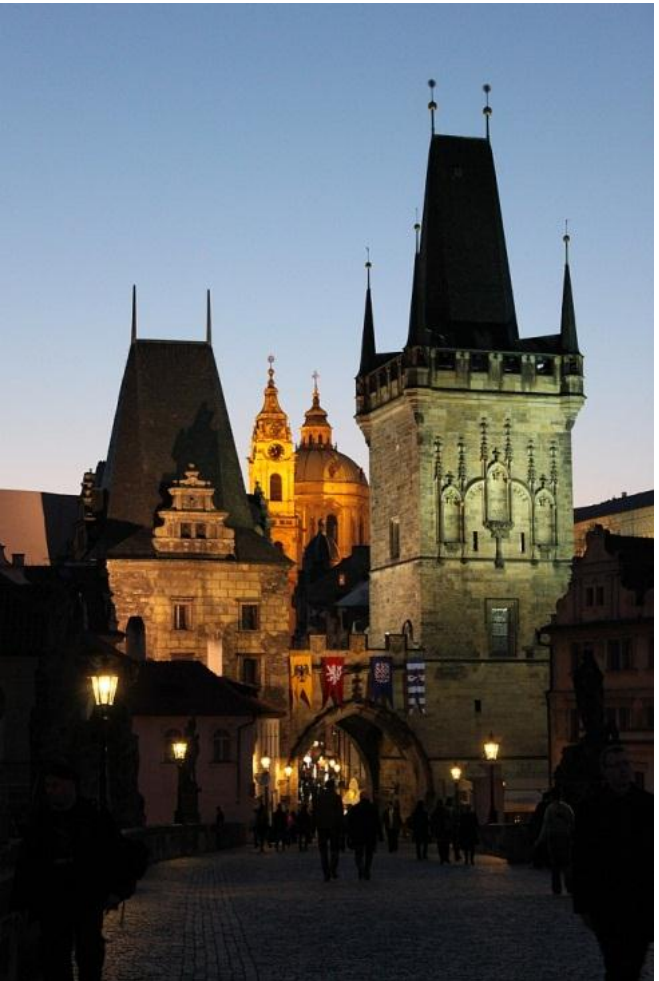
EVEQ 2012

International Summer School on Evolution Equations, Prague, Czech Republic, 9.-13. 7. 2012



Organizing institutions:

- **Charles University in Prague,**
- **Faculty of Mathematics and Physics, Charles University**
- **Institute of Mathematics, Academy of Sciences of the Czech Republic**

Activity of

- **Jindřich Nečas Center for Mathematical Modeling.**

Satellite meeting of

- **the 6th European Congress of Mathematics**

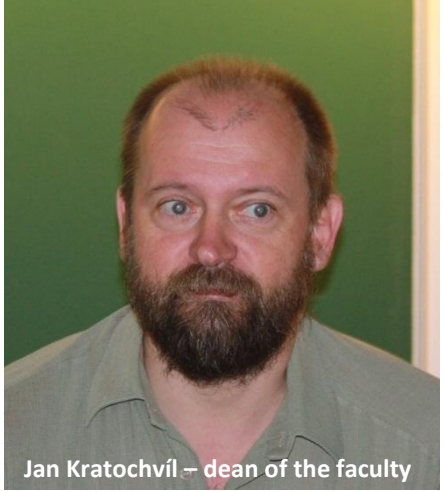
Accompanying event to

- **60th anniversary of the Faculty of Mathematics and Physics, Charles University in Prague.**

Venue: Faculty of Mathematics and Physics, Malostranské nám. 25, Prague

EVEQ 2012 - Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
8,30		8.30-9.45 **Rodnianski**			
8,45					
9,00	OPENING		9.00-10.15 **Abels**	9.00-10.15 **Constantin**	9.00-10.15 **Gérard-Varet**
9,15					
9,30	9.15-10.30 **Serfaty**				
9,45		9.45-10.15 COFEE & CAKE			
10,00					
10,15		10.15-11.30 **Serfaty**	10.15-10.45 COFFEE & CAKE	10.15-10.45 COFFEE & CAKE	10.15-10.45 COFFEE & CAKE
10,30	10.30-11.00 COFFEE & CAKE				
10,45			10.45-12.00 **Serfaty**	10.45-12.00 **Abels**	10.45-12.00 **Stefanelli**
11,00	11.00-12.15 **Constantin**				
11,15					
11,30		11.30-11.50 COFFEE			
11,45					
12,00					CLOSING
12,15	lunch	11.50-13.05 **Gérard-Varet**	lunch	lunch	lunch
12,30					
12,45					
13,00					
		lunch			
14,00		FREE AFTERNOON			
14,15	14.00-15.15 **Gérard-Varet**		14.00-15.15 **Poster session (1)**	14.00-15.15 **Poster session (2)**	
14,30					
14,45					
15,00					
15,15	15.15-15.45 COFFEE & CAKE		15.15-15.45 COFFE & CAKE	15.15-15.45 COFFE & CAKE	
15,30					
15,45	15.45-17.00 **Stefanelli**		15.45-17.00 **Constantin**	15.45-17.00 **Rodnianski**	
16,00					
16,15					
16,30					
16,45					
17,00	17.00-17.20 COFFEE		17.00-17.20 COFFEE	17.00-17.20 COFFEE	
17,15					
17,30	17.20-18.35 **Abels**		17,20-18,35 **Rodnianski**	17.20-18.35 **Stefanelli**	
17,45					
18,00					
18,15					
18,30					
18,45	18.35- **Welcome Party**		19.30- **Conference dinner**		

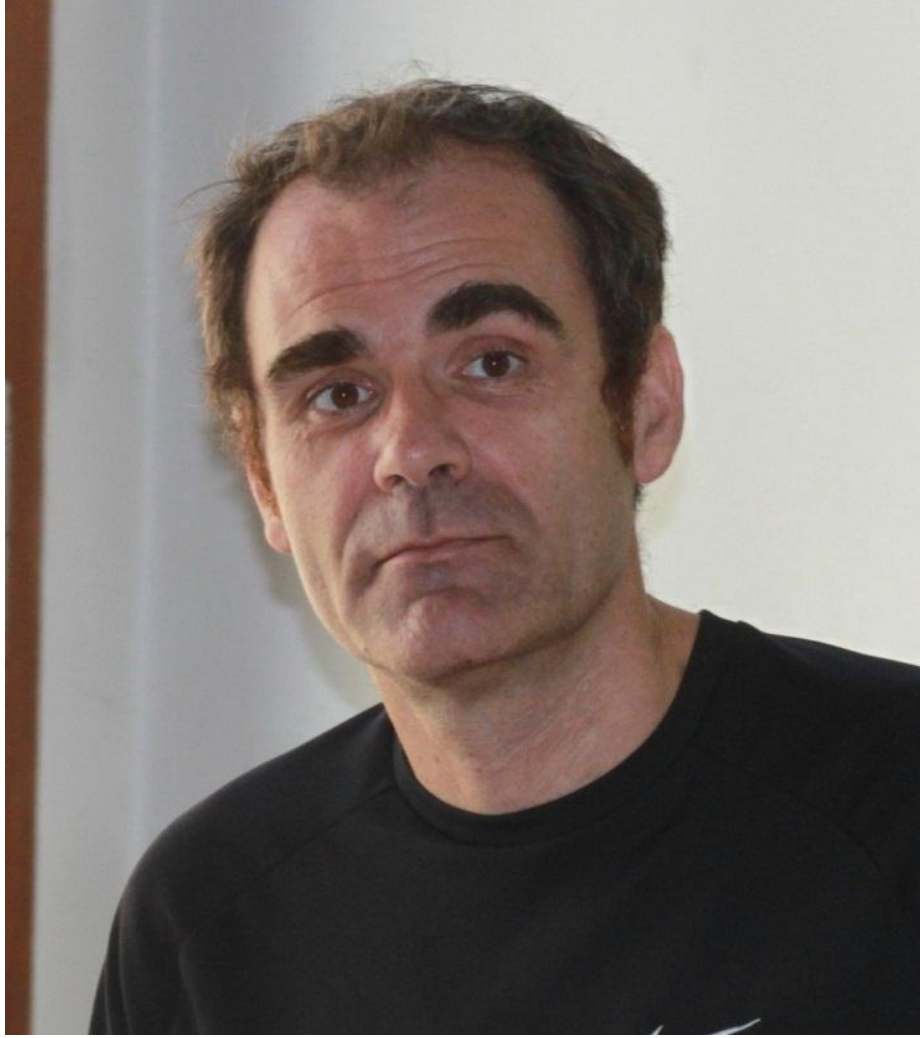


Jan Kratochvíl – dean of the faculty

Schedule of lectures, opening and chairmen:

Helmut Abels (Universität Regensburg):

On sharp and diffuse interface models for viscous two-phase flows



Adrian Constantin (Universität Wien):
Nonlinear water waves

David Gérard-Varet (Université Denis Diderot Paris 7):
Regularity issues in fluid-solid dynamics

Igor Rodnianski (Princeton University):

Evolution problem in general relativity

Sylvia Serfaty (Université Pierre et Marie Curie Paris 6):

Topics on Gamma-convergence of gradient flows and the Ginzburg-Landau equation

Ulisse Stefanelli (Istituto di Matematica Applicata e Tecnologie Informatiche, Pavia)

The WIDE principle

Poster sessions (1)

Wednesday 11. 7.

Alexander Kozhevnikov
On multi-weighted parabolic systems

Jakub Tichý
Boundary regularity of flows under perfect slip boundary conditions

Martina Hofmanová
Degenerate parabolic stochastic partial differential equations

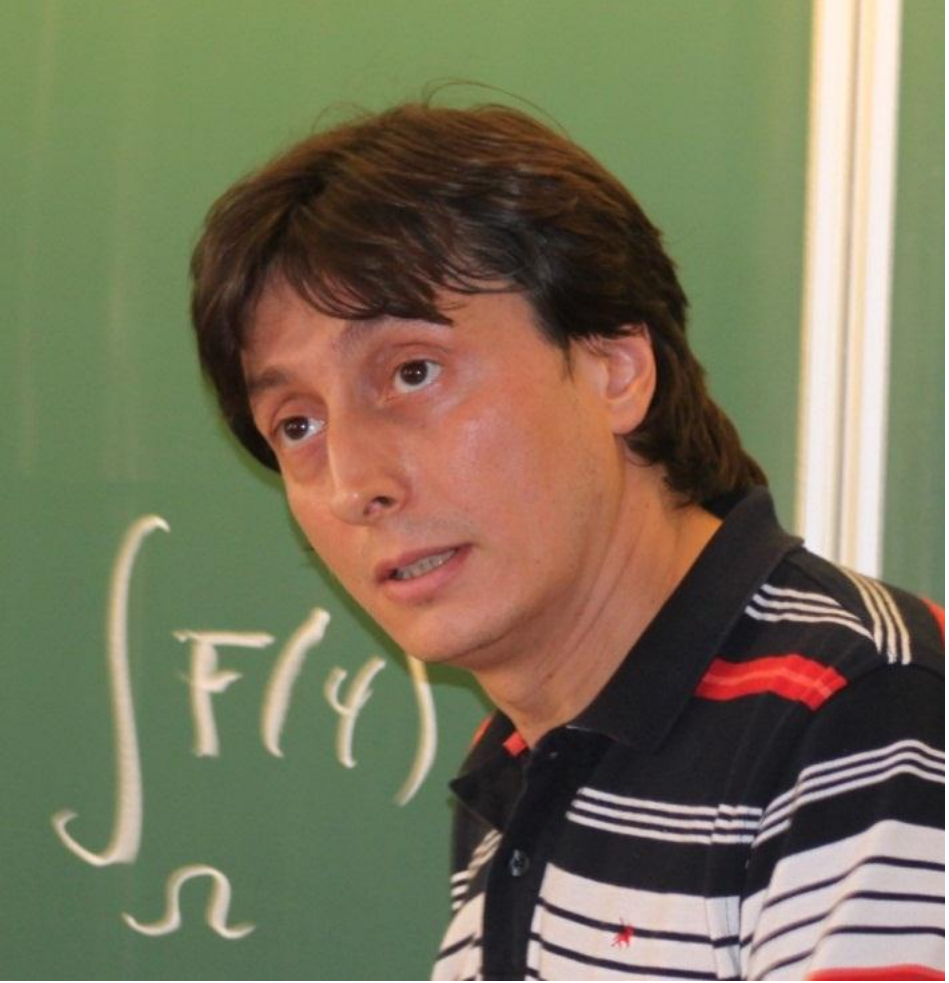
Xian Liao
Wellposedness for low Mach number limit system

Francesco Fanelli

On the density-dependent incompressible Euler system in Besov spaces

Ilya Mogilevskiy

Numerical approach to a plane free boundary problem



Sergio Frigeri
Nonlocal diffuse-interface models for binary fluids

Ewelina Zatorska
Navier-Stokes equations for chemically reacting mixtures

Karoline Goetze

Free movement of a rigid body in
a viscoelastic fluid

Poster sessions (2)

Thursday 12. 7.

Milan Pokorný
Time-periodic solutions to the full Navier-Stokes-Fourier system

Aneta Wróblewska
Motion of rigid bodies in a non-Newtonian fluids with nonstandard rheology

Tomáš Bárta
One-dimensional models of materials with memory

Václav Mácha
Partial Hölder regularity of steady flows in bounded domains

Daniel Lengeler
Global weak solutions for a fluid-shell interaction problem

Jan Březina
Asymptotic behavior of solutions to the compressible Navier-Stokes equation around a time-periodic parallel flow

Milena Matusik

Existence of classical solutions for parabolic functional differential equations with initial boundary conditions of Robin type

Adrian Karpowicz

The maximum principle for viscosity solutions of elliptic differential functional equations

Jan Papež
Algebraic error in the numerical solution of differential equations

Jaroslav Havrda
A model for ionized mixtures





Welcome party






Conference dinner

Conference photo – Thursday 12:10





Organizing committee:

- **Miroslav Bulíček**
- **Eduard Feireisl**
- **Pavle Krejčí**
- **Josef Málek**
- **Vít Průša**

Secretary:

- **Lenka Bauerová**
- **Jana Pešková**

Thanks to the organizers

Photo and presentation by Jan Franců