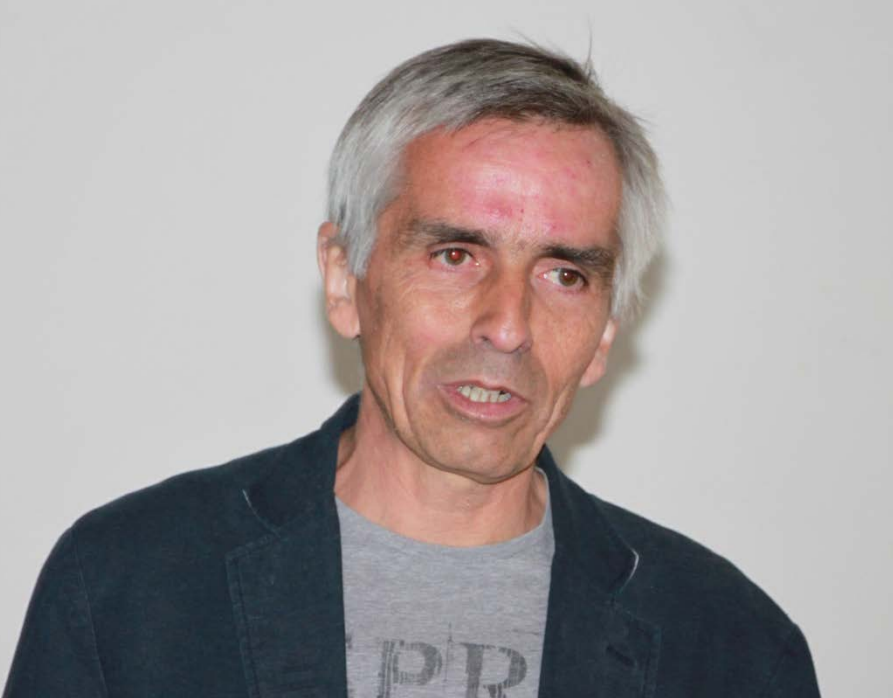


**RIPE60 – Rate Independent Processes and Evolution
Workshop on the occasion of Pavel Krejčí 60th birthday**



Prague, June 24 – 26, 2014



Tuesday 24 – opening



The thermodynamics of Pavel



First Principles of Character (*energetic* part of Krejčí internal energy)

- honesty, sincerity and truthfulness
- courtesy and politeness
- reliability and sense of responsibility
- courage and steadfastness
- a deep sense of justice
- ability to cooperation
- respect for others and tolerance
- humour, irony and self-mockery

Second Principle of Character (*entropic* part of Krejčí internal energy)

- The **burning thirst** of Pavel Krejčí for learning and understanding the truth (= motivation to do research) is **nondecreasing**.

**Jürgen Sprekels: Experiencing the friendship of a great personality:
almost twenty years of cooperation with Pavel Krejčí**



Philippe Laurençot: *A free boundary problem modelling a microelectromechanical system*



Pierluigi Colli: *Phase field systems of viscous Cahn-Hilliard type*



Olaf Klein: *Classification of hysteresis operators for vector-valued inputs by using their representation as functions on strings*



Maurizio Grasselli: *Nonlocal Cahn-Hilliard-Navier-Stokes systems: the 2D case*



PhilippeSergio Frigeri: *Cahn-Hilliard-Navier-Stokes systems with nonlocal interactions and optimal control*



Klaus Kuhnen: *Rate-independent dissipation in power electronic circuits*



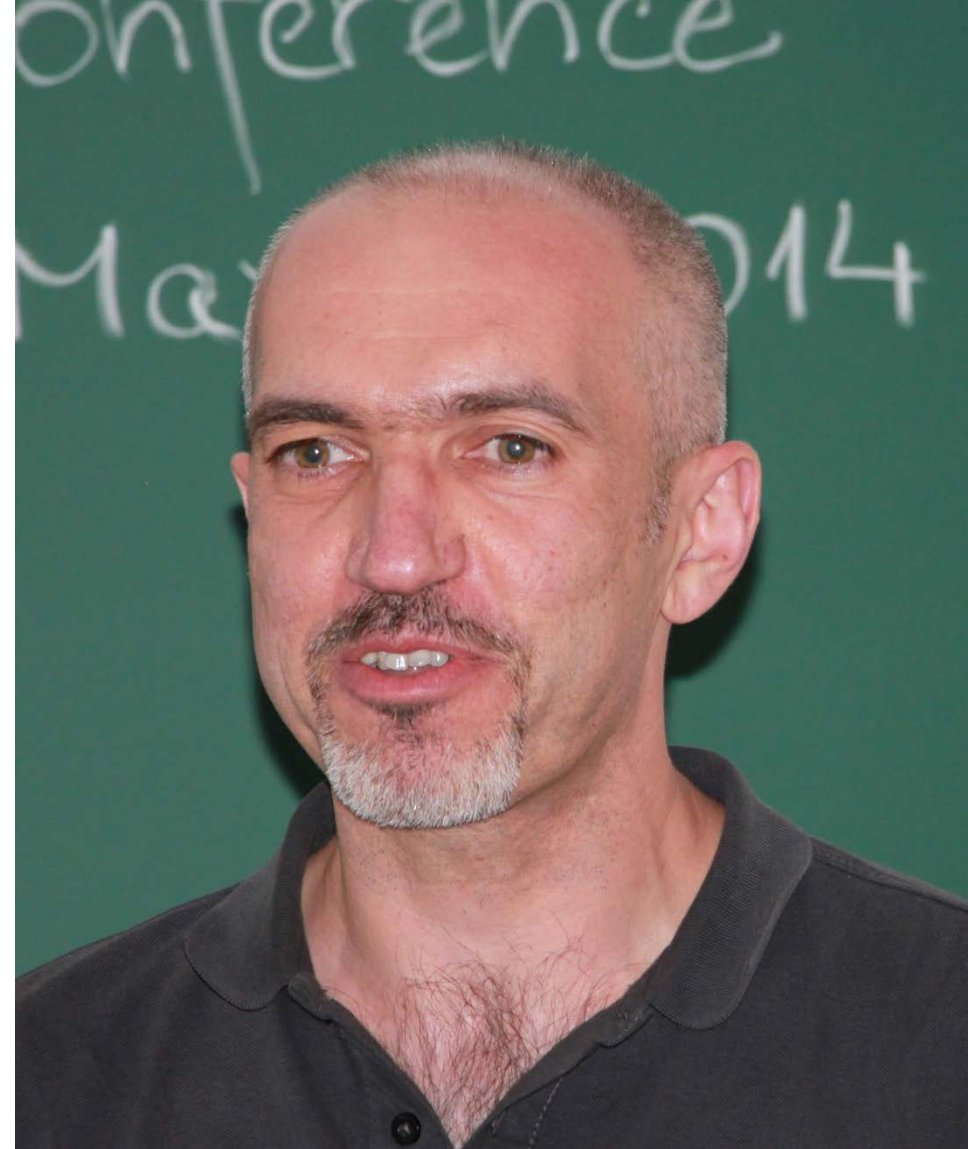
Daniele Davino: *Identification of a new class of operators aimed to the modelling of smart materials*



Jana Kopfová: *Hysteresis in different modelling situations – my math journey with Pavel*

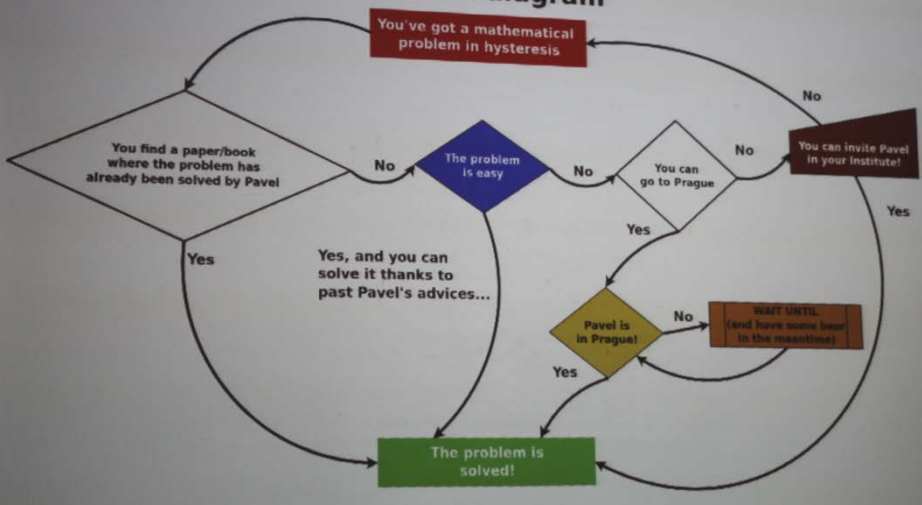


Matthias Liero: *On dissipation distances for reaction-diffusion equations - the Hellinger-Kantorovich distance*

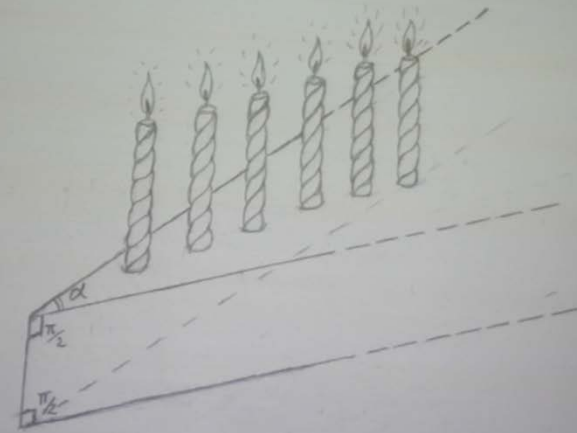


Vincenzo Recupero: *Polyhedra and variational evolution limits*

Pavel's solving problems flux diagram

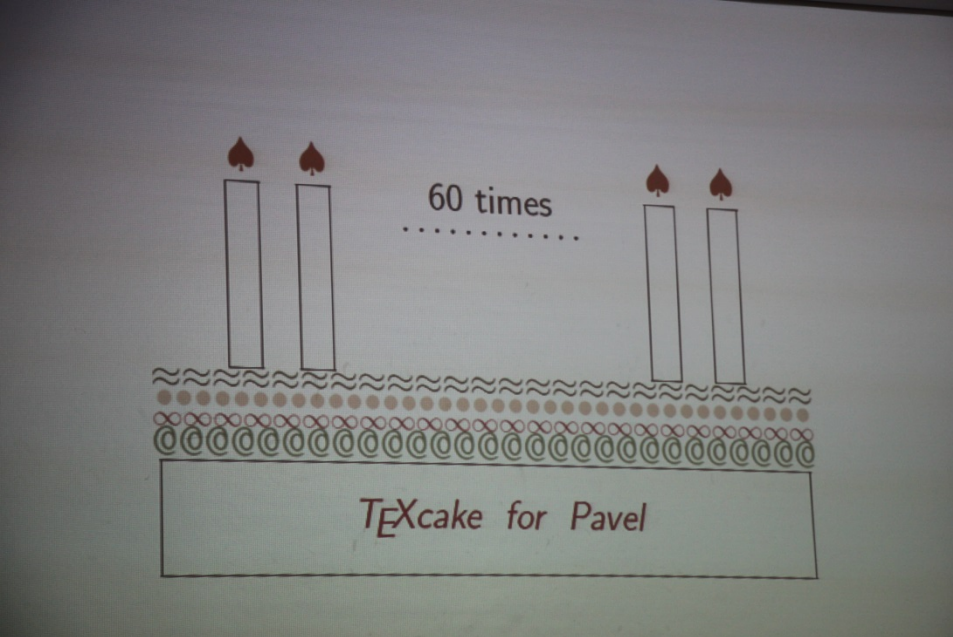


$$0 < \alpha \leq \frac{\pi}{2}$$



Infinite cake segment: HAPPY BIRTHDAY!





Wednesday 25



Gianni Gilardi: *On a Cahn-Hilliard type phase field system related to tumor growth*



Alain Miranville: *Recent results on the Cahn-Hilliard equation and some of its variants*



Barbara Kaltenbacher:
*Well-posedness for a thermodynamically
consistent model of ferroelectricity
and ferroelasticity*



Dmitrii Rachinskii: *Discontinuous
Prandtl-Ishlinskii operators and
their network connections*



Dietmar Hömberg:
*Models of induction hardening
– an FK limited approach*



Jan Chleboun:
*A note on optimal node and
polynomial degree distribution in
one-dimensional hp-FEM*



Hana Petzeltová: *Mathematical analysis of variable density flows in porous media*



Ciro Visone: *The mathematics of hysteresis in the progress of analysis and design of devices exploiting non-reversible processes*



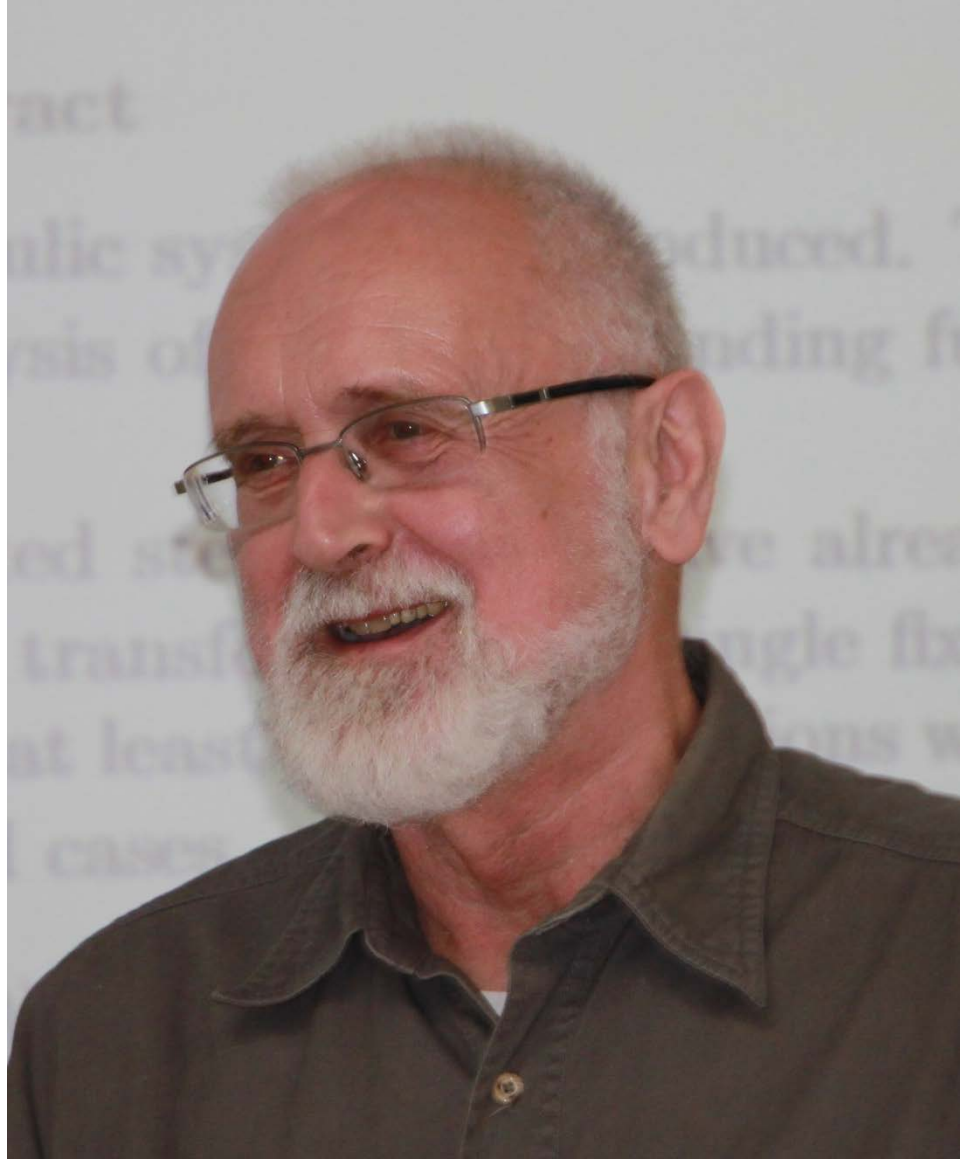
Adrien Petrov: *Solvability for elasto-plastic contact problems with heat transfer*



Tomáš Roubíček: *Various solution concepts in rate-independent evolution systems*



Michela Eleuteri: 2004-2014
*Story of a ten-years collaboration
(with hysteresis)*



Ivan Straškraba:
Two phase flow in hydraulics



Conference Dinner - Boat "Maria" on the Vltava River





Thursday 26 – Bolzano Prize Ceremony





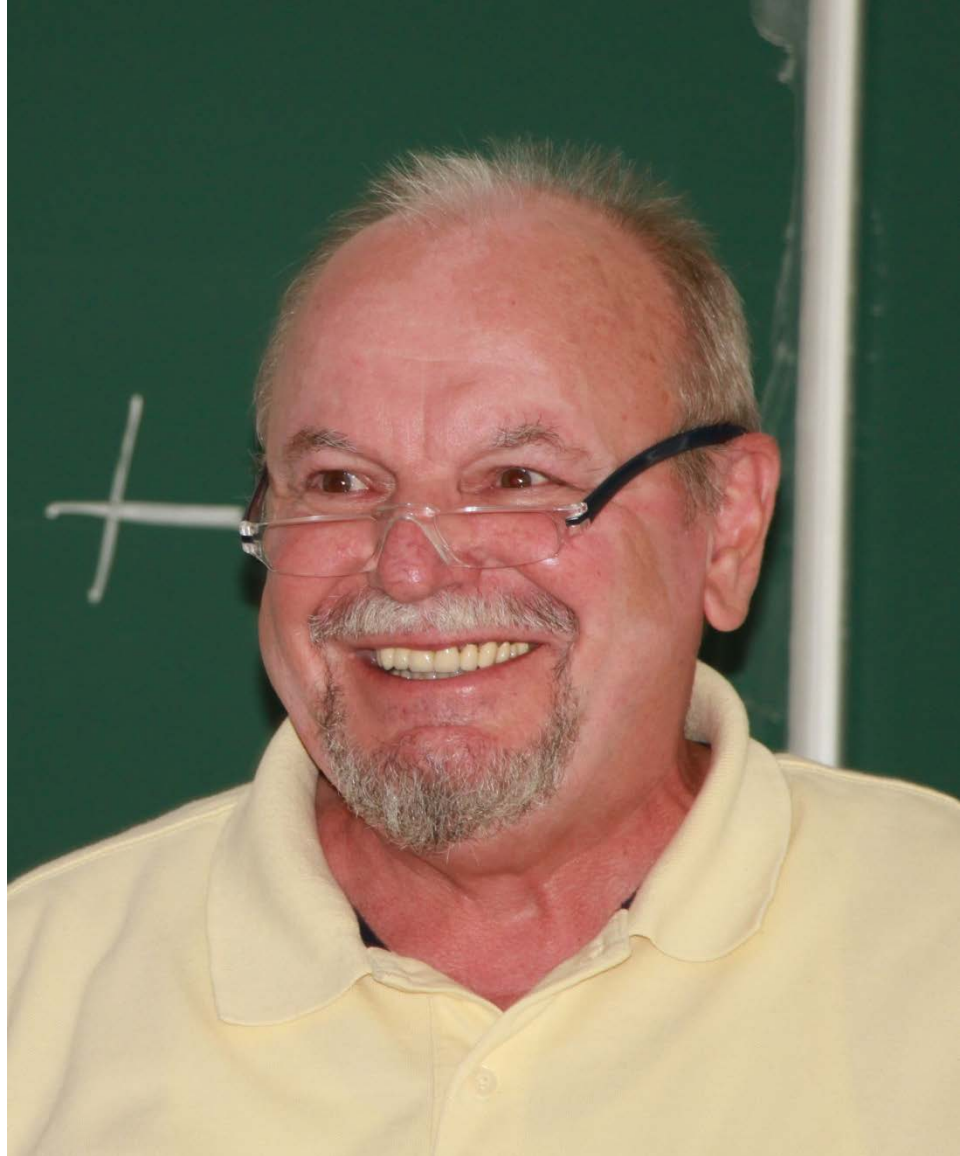
Martin Brokate: *Differential sensitivity of systems with scalar hysteresis*



Jan Franců: *Reliable solution of problems with hysteresis operators*



Giulio Schimperna:
*On a general class of doubly
nonlinear equations*



Pavel Drábek: *Travelling waves
in quasilinear FKPP equation*

Thanks to the organizers: Eduard Feireisl, Elisabetta Rocca
Lenka Bauerová and Beata Kubiś
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Happy Birthday Pavel

Photo and Design: Jan Franců