

Trieste, June 21-22, 2007

## **Fifth meeting on Hyperbolic Conservation Laws: Recent results and Research perspectives**

### **Program**

**Thursday June 21, afternoon.** Chairman: Stefano Bianchini (SISSA-ISAS, Trieste)

- 14:15        Opening
- 14:30-15:25 Alessio Figalli (SNS, Pisa ): *Generalized flows for non-smooth ordinary and stochastic differential equations*
- 15:30-15:55 Lorenzo Pareschi (Università di Ferrara): *Monte Carlo methods and conservation laws*
- 16:00-16:30 Coffee Break
- 16:30-16:55 Chiara Simeoni (Université de Nice): *Schemi numerici di tipo "upwind" per le leggi di conservazione con termini di sorgente*
- 17:00-17:25 Corrado Mascia (Università di Roma "La Sapienza"): *Cosa c'è al di là della condizione di Shizuta-Kawashima?*
- 17:30-17:55 Laura V. Spinolo (Northwestern University): *Perturbation techniques applied to the parabolic approximation of a boundary Riemann problem*
- 17:30-17:55 Graziano Guerra (Università di Milano-Bicocca): *Quasi differential equations in metric spaces and applications to systems of balance laws*
- 20:15        **Social Dinner**

**Friday June 22, morning.** Chairman: Andrea Marson (Università di Padova)

- 9:00-9:55    Giovanni Alberti (Università di Pisa): *A level-set decomposition for a linear transport equations in the plane*
- 10:00-10:25 Paolo Antonelli (Università dell'Aquila): *The Cauchy problem for the quantum hydrodynamics system with large data in the space of energy*
- 10:30-11:00 Coffee Break
- 11:00-11:25 Massimiliano Rosini (Università di Brescia): *Weakly nonlinear surface waves in van der Waals-like fluids*
- 11:30-11:55 Carlotta Donadello (SISSA-ISAS, Trieste): *On the approximation of conservation laws by vanishing viscosity*
- 12:00-12:25 Andrea Corli (Università di Ferrara): *Hyperbolic phase-mixing flows: a global existence result for large data*

**Friday June 22, afternoon.** Chairman: Fabio Ancona (Università di Bologna)

14:15-14:40 Mauro Mariani (Università di Roma "La Sapienza"): *Entropy cost for conservation laws via Gamma-convergence*

14:45-15:10 Francesca Guarguaglini (Università dell'Aquila): *Modelli matematici per fenomeni chimici e biologici*

15:15-15:40 Mauro Garavello (Università del Piemonte Orientale): *The  $p$ -system on junctions*

15:45-16:10 Coffee Break

16:10-16:35 Massimo Fonte (Austrian Academy of Sciences, Linz): *On the conservative and dissipative solutions of the Camassa-Holm equation*

16:40-17:05 Fabio Priuli (NTNU, Trondheim): *Nearly optimal feedback controls*