

L'Aquila, July 17-19, 2007

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

Program

Thursday July 17, morning. Chairman: P. Marcati (Università dell'Aquila)

8:30-9:00 Registration

9:00-9:15 Opening

9:15-10:00 Ingenuin Gasser (University of Hamburg): *Which features survive the continuum limit in traffic flow modeling?*

10:05-10:30 Coffee Break

10:30-10:55 Carlotta Donadello (SISSA-ISAS, Trieste): *On the approximation of systems of conservation laws by vanishing viscosity*

11:00-11:25 Riccarda Rossi (Università di Brescia): *On the vanishing viscosity approximation of general rate-independent systems*

11:30-11:55 Donatella Donatelli (Università dell'Aquila): *A tremendous crash course.....zip.....zip on Strichartz estimates*

Thursday July 17, afternoon. Chairman: F. Ancona (Università di Bologna)

15:00-15:45 Pierre-Emmanuel Jabin (Université de Nice Sophia Antipolis): *ODE with singular force fields*

15:50-16:15 Coffee Break

16:15-16:40 Magali Mercier (Université Claude Bernard - Lyon 1): *Traffic flow modelling with junctions from a multiclass point of view*

16:45-17:10 Mauro Garavello (Università del Piemonte Orientale): *New results about the LWR model on a network*

17:15-17:25 Break

17:25-17:50 Massimiliano Rosini (Università di Brescia): *On continuum models for pedestrian flows and Braess' paradox*

17:55-18:20 Francesca Monti (Università di Milano-Bicocca): *Solutions with Large Total Variation to Nonconservative Hyperbolic Systems*

20:30 Social Dinner

Friday July 18, morning. Chairman: R.M. Colombo (Università di Brescia)

10:15-11:00 Constantine M. Dafermos (Brown University): *On policonvexity*

11:05-11:30 Coffee Break

11:30-11:55 Corrado Lattanzio (Università dell'Aquila): *Radiative shock waves for hyperbolic-elliptic systems*

12:00-12:25 Debora Amadori (Università dell'Aquila): *A model of granular flow: global existence of BV solutions and "slow avalanche" limit*

12:30-12:55 Andrea Tosin (IAC-CNR, Roma): *Time-evolving measures for pedestrian traffic*

Friday July 18, afternoon. Chairman: S. Bianchini (SISSA-ISAS, Trieste)

15:00-15:45 Giovanni Alberti (Università di Pisa): *A uniqueness result for transport equations in 2 space dimensions with irregular coefficients*

15:50-16:15 Coffee Break

16:15-16:40 Matteo Gloyer (SISSA-ISAS, Trieste): *On the Euler-Lagrange equation for a variational problem: the general case*

16:45-17:10 Laura Caravenna (SISSA-ISAS, Trieste): *A partial proof of Sudakov theorem via disintegration of measures*

17:15-17:40 Alessio Brancolini (Politecnico di Bari): *Ramified transportation via path functionals on Wasserstein spaces*

17:45-17:55 Break

17:55-18:20 Francesca Marcellini (Università di Milano-Bicocca): *Smooth and Discontinuous Junctions in gas pipelines*

18:25-18:50 Graziano Guerra (Università di Milano-Bicocca): *Balance Laws with L^∞ unbounded sources and application to junctions with discontinuous cross section*

Saturday July 19, morning. Chairman: B. Rubino (Università dell'Aquila)

9:00-9:45 José Antonio Carrillo (Universitat Autònoma de Barcelona):
Critical cases for Keller-Segel systems

9:50-10:00 Break

10:00-10:25 Massimo Fonte (RICAM, Linz): *Shock stability for the Burgers-Poisson Equation*

10:30-10:55 Federica Pezzotti (Università dell'Aquila): *Mean-field limit and semiclassical expansion of a large quantum particle system*

11:00-11:25 Alessandro Morando (Università di Brescia): *Regularity of characteristic boundary value problems for linear hyperbolic systems*

11:30-11:55 Davide Catania (Università di Brescia): *Blow-up for a semilinear wave equation in the presence of a black hole*

12:00 Closing