

Trieste, August 31- September 4, 2009

**Seventh Meeting on
Hyperbolic Conservation Laws and Fluid Dynamics:
Recent Results and Research Perspectives**

Program

Monday August 31, morning. Chairman: Stefano Bianchini (SISSA-ISAS, Trieste)

8:30-8:55 Registration

8:55-9:00 Opening

9:00-9:55 Nicola Gigli (University of Bordeaux): *Second Order Analysis over the Wasserstein Space* (I lecture)

10:00-10:30 Coffee Break

10:30-11:25 Nicola Gigli (University of Bordeaux): *Second Order Analysis over the Wasserstein Space* (II lecture)

11:30-12:15 Roger Robyr (University of Zurich): *SBV regularity of entropy solutions for a class of genuinely nonlinear scalar balance laws with non-convex flux function*

Monday August 31, afternoon. Chairman: Rinaldo M. Colombo (Università di Brescia)

15:00-15:55 Corrado Mascia (Università di Roma "La Sapienza"): *A dive into Shallow Water: an Analytical Glance on Saint-Venant Model* (I lecture)

16:00-16:55 Corrado Mascia (Università di Roma "La Sapienza"): *A dive into Shallow Water: an Analytical Glance on Saint-Venant Model* (II lecture)

17:00-17:30 Coffee Break

17:30-18:15 Francesca Monti (Università di Milano "Bicocca"): *2×2 systems of conservation laws with L^∞ data*

Tuesday September 1, morning. Chairman: Fabio Ancona (Università di Padova)

9:00-9:55 Laura V. Spinolo (SNS, Pisa): *On the Study of the Viscous Approximation of Hyperbolic Problems via ODE Analysis* (I lecture)

10:00-10:30 Coffee Break

10:30-11:25 Laura V. Spinolo (SNS, Pisa): *On the Study of the Viscous Approximation of Hyperbolic Problems via ODE Analysis* (II lecture)

11:30-12:15 Stefano Spirito (Università di L'Aquila): *Weak Solutions of the Navier-Stokes equation constructed by artificial compressibility methods are suitable*

Tuesday September 1, afternoon. Chairman: Stefano Bianchini (SISSA-ISAS, Trieste)

15:00-15:55 Nicola Gigli (University of Bordeaux): *Second Order Analysis over the Wasserstein Space* (III lecture)

16:00-16:55 Nicola Gigli (University of Bordeaux): *Second Order Analysis over the Wasserstein Space* (IV lecture)

17:00-17:30 Coffee Break

17:30-18:15 Laura Caravenna (SISSA-ISAS, Trieste): *Some problems in Optimal Mass Transport studied by Disintegration of Measures*

Wednesday September 2, morning. Chairman: Rinaldo M. Colombo (Università di Brescia)

9:00-9:55 Corrado Mascia (Università di Roma "La Sapienza"): *A dive into Shallow Water: an Analytical Glance on Saint-Venant Model* (III lecture)

10:00-10:30 Coffee Break

10:30-11:25 Corrado Mascia (Università di Roma "La Sapienza"): *A dive into Shallow Water: an Analytical Glance on Saint-Venant Model* (IV lecture)

11:30-12:15 Emiliano Cristiani (Università di Salerno e IAC-CNR, Roma): *Macroscopic and microscopic self-organization by nonlocal anisotropic interactions*

Wednesday September 2, afternoon. Chairman: Andrea Marson (Università di Padova)

15:00-15:55 Nicola Gigli (University of Bordeaux): *Second Order Analysis over the Wasserstein Space* (V lecture)

16:00-16:45 Matteo Gloyer (SISSA-ISAS, Trieste): *TBA*

16:50-17:20 Coffee Break

17:20-18:05 Francesca Crispo (Università di Pisa): *On the Regularity and Inviscid Limit for the Navier-Stokes Equations with Slip type Boundary Conditions*

Thursday September 3, morning. Chairman: Andrea Marson (Università di Padova)

9:00-9:55 Luigi Berselli (Università di Pisa): *On the Stokes Problem with Navier Boundary Conditions* (I lecture)

10:00-10:30 Coffee Break

10:30-11:25 Luigi Berselli (Università di Pisa): *On the Stokes Problem with Navier Boundary Conditions* (II lecture)

11:30-12:25 Corrado Mascia (Università di Roma "La Sapienza"): *A dive into Shallow Water: an Analytical Glance on Saint-Venant Model* (V lecture)

Thursday September 3, afternoon. Chairman: Fabio Ancona (Università di Padova)

15:00-15:55 Laura V. Spinolo (SNS, Pisa): *On the Study of the Viscous Approximation of Hyperbolic Problems via ODE Analysis* (III lecture)

16:00-16:55 Laura V. Spinolo (SNS, Pisa): *On the Study of the Viscous Approximation of Hyperbolic Problems via ODE Analysis* (IV lecture)

20:30 **Social Dinner**

Friday September 4, morning. Chairman: Rinaldo M. Colombo (Università di Brescia)

9:00-9:55 Laura V. Spinolo (SNS, Pisa): *On the Study of the Viscous Approximation of Hyperbolic Problems via ODE Analysis* (V lecture)

10:00-10:30 Coffee Break

10:30-11:25 Luigi Berselli (Università di Pisa): *On the Stokes Problem with Navier Boundary Conditions* (III lecture)