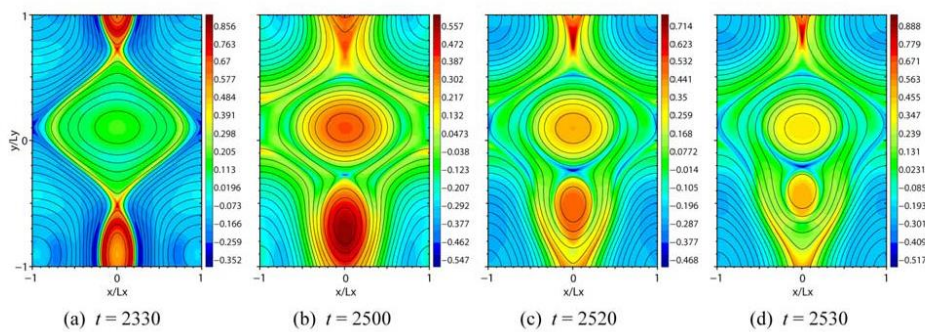


# IFP-CNR – Chalmers Workshop on Nonlinear Phenomena in Fusion Plasmas

Villa Monastero, Varenna, June 8-11, 2011



## Programme

### June 8

900 *Opening, welcome* Jan Weiland/Enzo Lazzaro

905 **Hans Wilhelmsson memorial session** *Chairman Enzo Lazzaro*

905 Jan Weiland

920 Enzo Lazzaro

935 Anatoly Zagorodny

All presentations 35 min = talk 30 min+ questions 5 min

950 **Statistical physics**

*Chairman Anatoly Zagorodny*

950 Approach to the Thermodynamics of High Temperature (non-Maxwellian) Plasmas  
Ettore Minardi

10.25 Particle Pinch in Gyrokinetic Simulations of Closed Field-line Systems Sumire  
Kobayashi

1100 Coffee break

1120 Closure at the Irreducible Part of the Fourth Moment for the Case of Constant Coefficients in the Fokker-Planck Equation. Anatoly Zagorodny

1155 Fluid Closure, Theory, Relations to Particle pinches, Fluid Resonances Jan Weiland

1230 Taking picture at the staircase

1245 Lunch

**1400 Strongly nonlinear effects**

*Chairman Paola Mantica*

1400 Strong Nonlinear Effects in a Neoclassical Model of Magnetic Reconnection Enzo Lazzaro

1435 Hamiltonian Gyrofluid Models Francois Waelbroeck

1510 *Coffee*

1530 Solitary Nonlinear Cusp Structures in Strongly Coupled Dusty Plasmas Predhiman Kaw

1605 -1730 Discussion first day lectures

**June 9**

**900 Plasma flows**

*Chairman Jan Weiland*

900 Recent Progress in Intrinsic Rotation and Momentum Transport Taik-Soo Hahm

935 Plasma Rotation and Toroidal Momentum Transport in Tokamak. Andrei Smolyakov

1010 Two-fluid Analysis of the Geodesic Acoustic Mode (GAM) Akira Hirose

1045 *Coffee*

1105 Ion Stiffness Mitigation as a Key for Improved Core Ion Confinement: experimental results in JET and theoretical investigations Paola Mantica

1140 Generation/Acceleration of Large Scale Plasma Flows due to Magneto-Fluid Coupling  
Nana Shatashvili

1215 Lunch

**1330 L-H transitions, I mode**

*Chairman Taik-Soo Hahm*

1330 Transitions to H-mode and I-mode Edge Transport Barriers on Alcator C-Mod Amanda Hubbard

1405 Heavy particle Modes and Theory of the I-confinement Regime; Physics Issues of Plasmas Close to Ignition and the Trinitite Collaboration Bruno Coppi

1440 *Coffee*

1500 Comparison between Edge and Internal Transport Barriers in Transport Simulations  
Jan Weiland

1535 Understanding of interactive physical processes in ITER scenario modeling, Tariq Rafiq.

1610 - 1740 Discussion second day lectures

**1930 Social dinner**

**June 10**

**900 General transport problems**

*Chairman Enzo Lazzaro*

900 Hypervelocity regime of dust particles in tokamaks Enzo Lazzaro

935 Stress Tests of Anomalous Transport Models Using FACETS Code Alexei Pankin

1010 Discussion General transport problems

1040 *Coffee*

1100 General discussion

1145 Closing