

**First International Summer School on ITER Physics:
Turbulence and Transport in Tokamaks**

AIX EN PROVENCE 16 July -20 July 2007

Monday July 16th

8 :00 – 9 :00: **Registration**

9 :00 – 9:30: **Opening ceremony chaired by the President of CNRS, Prof. Catherine Bréchnignac.**

9:30 – 11:00: **D. Campbell** (ITER Organization) “Introduction to ITER Physics”

11:00 – 11:30: **Coffee Break**

11:30 – 13:00: **W. Horton** (University of Texas at Austin, USA) “Drift waves and Transport”

13:00 – 14:30: **Lunch**

14:30 – 15:30: **B. D. Scott** (Max-Planck-Institut für Plasmaphysik, Garching, Germany)
“Computation of Turbulence in Magnetically Confined Plasmas I”

15:30 – 16:30: **S. Hamaguchi** (Osaka University, Japan) “ Nonlinear Evolution of Pressure Gradient Driven Modes and Anomalous Transport in Fusion Plasmas »

16:30 – 17:00: **Coffee Break**

17: 00 – 18:30: **R.B. White** (Princeton University, USA) “Tearing Modes and Transport”

18:45: **Welcome reception by the Mayor of Aix en Provence (at the Aix en Provence City Hall)**

Tuesday July 17th

8 :30 – 10 :00: **P. H. Diamond** (University of California, San Diego, USA)) “Dynamics of Transport Barriers and Shear Layer Evolution”

10:00 – 10:30: **Coffee Break**

10:30 – 12:00: **K. Itoh** (NIFS, Toki, Japan) “Physics of Zonal Flows”

12:00 – 13:00: **S. Cowley** (University of California, San Diego, USA) “ Review on MHD Turbulence »

13:00 – 14:30: **Lunch**

14:30 – 16:00: **F. Wagner** (Max-Planck Institute for Plasma Physics, Greiswald, Germany) “Physics of and Achievements with the H-mode”

16:00 – 17:00: **G. Bonhomme** (Nancy University, France) “Statistical Analysis of Tokamak Edge Turbulence”

17:00 – 17:30: **Coffee Break**

17:30 – 18:30: **R.B. White** (Princeton Univ, USA) “High Energy Particles in Tokamaks”

Wednesday July 18th

8 :30 – 10 :00: **T. S. Hahn** (Princeton Univ, USA) “Introduction to Tokamak Core Turbulence”

10:00 – 10:30: **Coffee Break**

10:30 – 12:00: **J. W Connor** (Euratom/UKAEA, UK) “Edge Localised Modes: Experiments and Theory”

12:00 – 13:00: **S. Cowley** (University of California, San Diego, USA) “ Review on MHD Turbulence”

13:00 – 14:30: **Lunch**

14:30 – 15:30: **P. Kaw** (IPR, Ahmedabad, India) “Nondiffusive Turbulent Transport in Tokamaks”

15:30 – 16:30: **C. Hidalgo** (CIEMAT, Spain) “Experimental Review on the Transport of Plasma Rotation in Magnetically Confined Plasmas”

16:30 – 17:00: **Coffee Break**

17:00 – 18:00: **B. D. Scott** (Max-Planck-Institut für Plasmaphysik, Garching, Germany) “Computation of Turbulence in Magnetically Confined Plasmas II”

18:00 – 19:00: **V. Naulin** (Risø National Lab, Denmark) “Impurity Turbulent Transport in Tokamaks”

Thursday July 19th

8 :30 – 10 :00: **K. Spatschek** (Dusseldorf Univ, Germany) “Stochastic Transport: Basic Physics for ITER”

10:00 – 10:30: **Coffee Break**

10:30 – 12:00: **Y. Idomura** (JAEA, Naka, Japan) “Kinetic Simulations of Turbulent Fusion Plasmas”

12:45: **Departure by bus to Cadarache for the “TORE SUPRA Visit” for those who registered for the visit and free afternoon for the others.**

20:00: **BANQUET at Hotel AQUABELLA in Aix en Provence**

Friday July 20th

8 :30 – 10 :00: **X. Garbet** (Euratom/CEA Cadarache, France) “Turbulent Transport in Fusion Plasmas: Scaling Laws, Transport Models and Barriers”

10:00 – 10:30: **Coffee Break**

10:30 – 12:00: **W. Horton** (University of Texas at Austin, USA) “Electron Temperature Gradient Driven Turbulence”.

12:00 – 13:00: **P. H. Diamond** (University of California, San Diego, USA)) “Turbulent Transport momentum and Spontaneous Rotation”

13:00 – 14:30: **Lunch**

14:30 – 15:30: **Del Castillo Negrete** (Oakridge National Lab, USA) “Non diffusive Transport in Fusion plasmas: A Fractional diffusion Approach”

15:30 – 16:30: **P. Hennequin** (Ecole Polytechnique, CNRS, France) “Edge Turbulence Tokamak Plasmas Experiments : Diagnostics and Scaling laws”

16:30 – 17:00: **Coffee Break**

17:00 – 18:00: **A. Sen** (IPR, Ahmedabad, India) “Physics of Neoclassical Tearing Modes”

18:00 – 18:15: **Closing of ITER School**