

The US-Japan Joint Institute for Fusion Theory Workshop on
Turbulent and neoclassical flow generation and associated transport dynamics

September 9-10, 2011, Long Branch, New Jersey

Each talk will be 30 minutes

Friday (9/09/11)

Afternoon

13:30 Introductory Remarks

13:35 – 15:35 Chairman: T.-H. Watanabe

K. Ida, Non-diffusive terms of momentum transport -viscosity and intrinsic torque- in toroidal plasmas

J. S. deGrassie, Edge intrinsic rotation and thermal ion orbit loss

W. Solomon, Transport and stability properties of plasmas with low torque and rotation

H. Ji, Study of angular momentum transport in laboratory flows relevant to accretion disks

15:35 – 16:00 coffee break

16:00 – 18:00 Chairman: W. Solomon

J. A. Krommes, An introduction to momentum conservation in magnetized plasmas

Y. Idomura, Effects of profile shear and kinetic electron response on momentum transport

C. S. Chang, Full-f study of turbulent and neoclassical flow physics in tokamak plasma

S. Murakami, Simulation study of toroidal flow generation by ICRF minority heating in the Alcator C-Mod plasma

Saturday (9/10/11)

Morning

8:40 – 10:10 Chairman: H. Sugama

S. J. Zweben, Edge zonal-like flows in NSTX and Alcator C-Mod

Jinlin Xie, Self-Regulating Drift Wave - Zonal Flow turbulence in a Linear Magnetized Plasma

T.-H. Watanabe, A two-scale approach for zonal flow and turbulence interactions and its application to non-axisymmetric systems

10:10 – 10:30 coffee break

10:30- 12:00 Chairman: J. A. Krommes

M. Nunami, Gyrokinetic simulation study on ITG turbulence and zonal flow in LHD with high ion temperature

S. Satake, Simulation studies on neoclassical viscosity in 3-dimensional magnetic configurations

L. Guozotto, Two-dimensional magnetohydrodynamic simulations of poloidal flows and pedestal formation by transonic effects

Afternoon

13:40 – 15:10 Chairman: Y. Idomura

J. Cheng, A kinetic MHD simulation of the tearing mode

K. Imadera, Global profile relaxation and entropy dynamics in turbulent transport

H. S. Zhang, Nonlinear frequency chirping of beta-induced Alfvén eigenmode

15:10- 15:30 coffee break

15:30-17:00 Chairman: S. J. Zweben

H. Sugama, Quasisymmetric toroidal plasmas with large mean flows

J.-K. Park, Intrinsic rotation generation in NSTX Ohmic H-mode plasmas

W. X. Wang, Turbulence driven Plasma rotation and current in tokamaks

17:00 Close