

Agenda for Japan-Korea Workshop on “Modeling and Simulation of Magnetic Fusion Plasmas”

August 19-20, 2013, Kyoto

Clock Tower Centennial Hall, Kyoto University

Conference Room III

August 19 (Monday)

9:10-9:30 Registration and opening

Session I: Overviews (Chair: S. Murakami)

9:30-10:00 J. Y. Kim: Recent progress in fusion plasma simulation research in NFRI

10:00-10:30 A. Fukuyama: Progress of integrated tokamak modeling by TASK

10:30-11:00 Coffee break

Session II: Integrated and PIC simulations (Chair: Y. S. Na)

11:00-11:30 Min-Gu Yu: Numerical simulation of Ohmic breakdown phase in a tokamak

11:30-12:00 H. Yamaguchi: Integrated transport simulation of time development LHD using GNET-TD and TASK3D

12:00-12:30 Y. Naito: Recent progress in PIC and gyro kinetic-PIC simulations in Yamaguchi University

LUNCH

Session III: Transport Simulation (Chair: Y. Todo)

13:30-14:00 H. G. Jhang: Ion temperature profile de-stiffening due to conversion of parallel compression into zonal flows

14:00-14:30 M. Nunami: Gyrokinetic simulation and reduced model for ITG turbulent transport in helical plasmas

14:30-15:00 N. Miyato : A high-order extension of the p_z electromagnetic gyrokinetic model

15:00-15:30 Coffee break

Session IV: Heating analysis and etc. (Chair: H.G. Jhang)

- 15:30-16:00 J. Kim: Numerical investigation of frequency spectrum in the Hasegawa-Wakatani model
- 16:00-16:30 H. Kohno: Radio-frequency sheath-plasma interactions with magnetic field tangency points along the sheath surface
- 16:30-17:00 S. Murakami: Development of momentum conserving and nonlinear collision operator for GNET code

BANQUET

August 20 (Tuesday)

Session V: Transport simulation (Chair: Naitou)

- 9:10-9:40 C. H. Bae: Extended neoclassical rotation theory and comparison with experiment
- 9:40-10:10 M. Honda: Simulations of toroidal rotation due to the neoclassical toroidal viscosity in tokamaks
- 10:10-10:40 A. Aydemir: Is there an easier way to calculate the radial electric field?
- 10:40-11:00 Coffee break

Session VI: Transport and MHD Simulations (Chair: J. Y. Kim)

- 11:00-11:30 Y. Kishimoto: Revisit of the kinetic damping in gyro-kinetic simulation and the role in multi-scale turbulent dynamics
- 11:30-12:00 K. Ichiguchi: Multi-Scale MHD Analysis of Heliotron Plasmas in Change of Background Field

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Session VII: Edge modeling and energetic particle simulations (Chair: C. H. Bae)

- 13:30-14:00 S. B. Shim: 2D simulation of detached divertor plasma in KSTAR
- 14:00-14:30 H. Seto: Two-dimensional transport modeling of tokamak plasmas
- 14:30-15:00 Y. Todo: Alfvén eigenmodes and energetic particle transport in ITER scenarios
- 15:30-16:00 Closing