

Hyatt Regency Dallas
300 Reunion Boulevard
Dallas, TX 75207, USA

Room location:
Cotton Bowl (Atrium Level)

2008 U.S.-Japan Workshop

Progress of Multi-Scale Simulation Models

11/21/08 - 11/22/08

Friday, November 21, 2008	
2:00 pm to 2:05 pm	Introductory remarks
	Session 1 (2:05 pm – 3:35 pm) Chair: Boris Breizman, The University of Texas at Austin, USA
2:05 pm to 2:35 pm	Shuhei Numazawa Graduate School of Frontier Sciences, The University of Tokyo, Chiba, Japan “Development of multi-scale simulation method via pseudo-particle method”
2:35 pm to 3:05 pm	John Cary Tech-X Corporation, Boulder, Colorado, USA “FACETS - a component approach to multiphysics challenges”
3:05 pm to 3:35 pm	Hong Qin Princeton Plasma Physics Laboratory, Princeton University, USA “Variational symplectic integrator for the guiding center motion of charged particles for long time simulations in general magnetic fields”
3:35 pm to 3:50 pm	Break
	Session 2 (3:50 pm – 5:50 pm) Chair: Sadayoshi Murakami, Kyoto University, Japan
3:50 pm to 4:20 pm	Akihiro Ishizawa National Institute for Fusion Science, Toki, Japan “Multi-scale interaction between micro-turbulence and macro-MHD”
4:20 pm to 4:50 pm	Linjin Zheng Institute for Fusion Studies, The University of Texas at Austin, USA “Non-hybrid computation of kinetic effects of linear MHD instabilities with AEGIS-K code”
4:50 pm to 5:20 pm	Hiroshi Naitou Graduate School of Science and Engineering, Yamaguchi University, Ube, Japan “Global kinetic MHD simulation by the gyrokinetic PIC code”

5:20 pm to 5:50 pm	<p>Yasuaki Kishimoto The Graduate School of Energy Science, Kyoto University, Uji, Kyoto, Japan “Nonlinear interaction and turbulent transport in mixed scale MHD and ITG fluctuations”</p>
Saturday, November 22, 2008	
	<p>Session 3 (9:00 am – 10:30 am) Chair: Bedros Afeyan, Polymath Research Inc., USA</p>
9:00 am to 9:30 am	<p>Brad Shadwick Department of Physics & Astronomy, University of Nebraska – Lincoln, USA “Towards multi-scale models of intense laser-plasma interactions”</p>
9:30 am to 10:00 am	<p>Hideo Nagatomo Institute of Laser Engineering, Osaka University, Suita, Japan “Multi-scale simulations for Fast Ignition and related laser plasma physics”</p>
10:00 am to 10:30 am	<p>Serguei Kalmykov Institute for Fusion Studies, The University of Texas at Austin, USA “Multi-scale theory and simulations for Texas Petawatt experiments on laser wakefield acceleration”</p>
10:30 am to 10:45 am	Break
	<p>Session 4 (10:45 am – 12:15 pm) Chair: Hiroshi Naitou, Yamaguchi University, Japan</p>
10:45 am to 11:15 am	<p>Sadayoshi Murakami Department of Nuclear Engineering, Kyoto University, Kyoto, Japan “Integrated simulation of ICRF heating in toroidal plasmas”</p>
11:15 am to 11:45 am	<p>Myunghee Choi General Atomics, San Diego, USA “Cross-code verification of quasi-linear ICRH modeling using 2-D linear full wave and 5-D Monte-Carlo particle solver”</p>
11:45 am to 12:15 pm	<p>Alex Arefiev Institute for Fusion Studies, The University of Texas at Austin, USA “Multi-scale aspects of magnetic nozzle modeling”</p>
12:15 pm to 13:45 pm	Break
	<p>Session 5 (13:45 pm – 15:15 pm) Chair: Hiroaki Ohtani, National Institute for Fusion Science, Japan</p>
13:45 pm to 14:15 pm	<p>Vladimir Mirnov Department of Physics, The University of Wisconsin – Madison, USA “Studies of nonlinear two fluid tearing modes in cylindrical Reversed Field Pinches”</p>
14:15 pm to 14:45 pm	<p>Ritoku Horiuchi National Institute for Fusion Science, Toki, Japan “Relationship between macro and micro physics in collisionless driven reconnection”</p>

14:45 pm to 15:15 pm	Shunsuke Usami National Institute for Fusion Science, Toki, Japan “Development of magnetic reconnection interlocked simulation model based on domain division method”
15:15 pm to 15:30 pm	Break
	Session 6 (15:30 pm – 16:00 pm) Chair: Alex Arefiev, The University of Texas at Austin, USA
15:30 pm to 16:00 pm	Hiroaki Ohtani National Institute for Fusion Science, Toki, Japan “PIC model for magnetic reconnection interlocked simulation model”
16:00 pm to 16:30 pm	Brian Sullivan Institute for the Study of Earth, Oceans, and Space, The University of New Hampshire, USA “The scaling of forced, collisionless reconnection in a simple 3D system”
16:30 pm to 17:00 pm	Naoki Bessho Center for Integrated Computation and Analysis of Reconnection and Turbulence, The University of New Hampshire, USA “PIC simulations of electron acceleration by magnetic reconnection with multiple magnetic islands”

Organizers:

Hiroaki Ohtani / National Institute for Fusion Science, Toki, Japan

Alex Arefiev / Institute for Fusion Studies, The University of Texas at Austin, USA

Talk abstracts can be downloaded at <http://peaches.ph.utexas.edu/ifs/jift2008-simulationmodels.html>

For more info contact Alex Arefiev

email: alexey@mail.utexas.edu

phone: 512.471.3316 (office)

512.589.8500 (cell)