

US-Japan JIFT Workshop on Integrated Modeling and Simulation in Toroidal Plasmas

Clock Tower Centennial Hall, Conference Room III

Kyoto University, Kyoto, Japan,

March 9 - 11, 2011

(Final agenda 2011-03-11)

March 9 (Wed)

09:15 Opening Fukuyama, Bonoli, and logistics

Integrated modeling 1 chairperson: Yagi

09:30	Bonoli, Paul	MIT	Integrated Modeling Activities in the US	slide	slide
				PDF	PPT
10:00	Fukuyama, Atsushi	Kyoto U	Present status of BPSI and the TASK code	abst	slide
					PDF
10:20	Hayashi, Nobuhiko	JAEA	Present status of integrated modeling code in JAEA	abst	slide
					PDF
10:40	Oishi, Tetsutarou	Nagoya U	Present status of the TOTAL code	abst	slide
				PDF	PPT
11:00	Coffee break				

Integrated modeling 2 chairperson: Bonoli

11:30	Yokoyama, Masayuki	NIFS	Development and application of integrated code for helical plasmas: ~Transport aspects~	abst	slide
					slide
				PDF	PPT
12:00	Sato, Masahiko	NIFS	Development and application of integrated code for helical plasmas: ~MHD aspects~	abst	slide
					PDF
12:30	Lunch				

Transport modeling 1 chairperson: Li

14:00	Pankin, Alexei	Tech-X corporation	Coupled core-edge simulations with the FACETS code	abst	slide
					PDF
14:30	Oishi, Tetsutarou	Nagoya U	Simulation of the fuel isotope ratio in DT burning plasmas using integrated code TOTAL	abst	slide
					slide
				PDF	PPT
15:00	Wakasa, Arimitsu	Kyoto U	Transport simulation of LHD plasmas using TASK3D		slide
					PDF
15:30	Miki, Masaki	Kyoto U	Transport simulation of helical plasmas using the dynamic transport model	abst	slide
					PDF
16:00	Coffee break				

Transport modeling 2 chairperson: Pankin

16:30	Li, Jiquan	Kyoto U	Micro-turbulence and transport in the presence of MHD driven magnetic island	abst	slide
					PDF
17:00	Yagi, Masatoshi	Kyushu U, JAEA	Off-resonant mode effect on ZF generation in reversed shear plasmas	abst	slide
					PDF
17:30	Satake, Shinsuke	NIFS	Simulation method of neoclassical toroidal viscosity in weakly perturbed tokamaks	abst	slide
					PDF
18:00	adjourn				

March 10 (Thu)

Energetic particle modeling 1			chairperson: Sugiyama			
09:30	Todo, Yasushi	NIFS	Simulations of Alfvén eigenmode bursts	abst	slide PDF	slide PPT
10:00	Kim, Charlson	Washington U, NIFS	Hybrid kinetic-MHD simulations with NIMROD		slide PDF	
10:30	Murakami, Sadayoshi	Kyoto U	Simulation study of ICRF heating by TASK/WM +GNET	abst	slide PDF	
11:00	Coffee break					
Energetic particle modeling 2			chairperson: Murakami			
11:30	Seki, Ryouzuke	NIFS	Re-entering effects on fast ion distribution function in low collisional LHD plasmas	abst	slide PDF	slide PPT
12:00	Honda, Mitsuru	JAEA	Alpha particle-driven toroidal rotation in burning plasmas	abst	slide PDF	
12:30	Lunch					
Wave modeling			chairperson: Fukuyama			
14:00	Bonoli, Paul	MIT	Recent advances in integrated modeling in the SciDAC center for simulation of wave-plasma interactionl	abst	slide PDF	
14:30	Takizuka, Tomonori	JAEA	High-efficiency ECCD with multi-wave system for DEMO	abst	slide PDF	
15:00	Kalinnikova, Evgeniya	Kyushu U	Modeling of OXB mode conversion scenario for EBWH/CD experiments in QUEST	abst	slide PDF	slide PPT
15:30	Nuga, Hideo	Kyoto U	Kinetic integrated modeling of plasma heating in tokamaks	abst	slide PDF	
16:00	Coffee break					
MHD modeling			chairperson: Todo			
16:30	Naitou, Hiroshi	Yamaguchi U	Parallelization of Gyrokinetic PIC code for MHD simulation	abst	slide PDF	
17:00	Raburn, Daniel	Kyoto U	Concept for calculation of 3D MHD equilibria with flow, FLR effects, and Islands	abst	slide PDF	
17:30	Fukuyama, Atsushi	Kyoto U	Full wave analysis in tokamak plasmas		slide PDF	
18:00	transfer to Kiyamachi					
19:00	Workshop dinner		Sakon Taro: http://www.sakontaro.co.jp/onjaku/			

March 11 (Fri)

Edge modeling			chairperson: Naitou		
09:15	Sugiyama, Linda	MIT	Plasma instabilities with free boundary	abst	slide PDF
09:45	Aiba, Nobuyuki	JAEA	Poloidal rotation effects on ELM and RWM in toroidally rotating tokamak plasmas	abst	slide PDF
10:15	Hayashi, Nobuhiko	JAEA	Integrated simulation of pellet triggered ELM	abst	slide PDF
10:45	Coffee break				
SOL/divertor modeling			chairperson: Hayashi		
11:15	Homma, Yuki	Keio U	Kinetic modeling of the thermal force based on the Monte Carlo binary collision model	abst	slide PDF
11:45	Kawamura, Gakushi	NIFS	Modeling and simulation of impurity transport in LHD divertor		slide PDF
12:15	Closing				