U.S. Transport Task Force Workshop

Bahia Resort and Hotel

San Diego, CA

USA

April 5-9, 2011

TTF PROGRAM

Tues., April 6	Wed., April 6	Thurs., April 7	Fri., April 8	Sat., April 9
	Welcome / Logistics (Ballroom B&C)			
	Plenary Session I (Mission Bay Ballroom ED)	**Plenary Session II** (Mission Bay Ballroom ED)	**Working Group Session I** Core (Shell) Edge (Bay ED) Energetic Particle (Del Mar) Momentum (Ventana)	**Working Group Session** Core (Shell) Edge (Bay ED) 3D Effects (Del Mar) Validation & Verification (Ventana)
	Break (Mission Bay Ballroom)	**Break** (Mission Bay Ballroom)	**Break** (Bayside Pavilion)	**Break** (Bayside Pavilion)
	Plenary Session I (Mission Bay Ballroom ED)	**Plenary Session II** (Mission Bay Ballroom ED)	**Working Group Session II** Core (Shell) Edge (Bay ED) Energetic Particle (Del Mar) Momentum (Ventana)	**Working Group Session** Core (Shell) Edge (Bay ED) 3D Effects (Del Mar) FSP (Ventana)
	Lunch	**Lunch**	**Lunch**	**Closing Remarks – 12:30 PM** (Mission Bay Ballroom ED)
	Plenary Session I (Mission Bay Ballroom ED)	**Plenary Session II** (Mission Bay Ballroom ED)	**Working Group Session III** Core (Shell) Edge (Bay ED) Energetic Particle (Del Mar) Momentum (Ventana)	MEETING ADJOURNS
	Break (Bayside Pavilion)	**Break** (Bayside Pavilion)	**Break** (Bayside Pavilion)	
	Poster Session (Bayside Pavilion)	**Poster Session** (Bayside Pavilion)	**Working Group Session IV** Core (Shell) Edge (Bay ED) Energetic Particle (Del Mar) Momentum (Ventana)	
6:00 pm - 8:00 pm **Welcome Reception/ Registration** (Mission Bay Ballroom A)	6:30 pm - 9:30 pm **Reception/Dinner**			

Date Wednesday, April 6, 2011		
Plenary Session I – Dynamics of Transitions to Enhanced Confinement Regimes		**Plenary Presentations (Mission Bay Ballroom ED)**
8:20–8:40		**Welcome / Logistics**
8:40-10:05	*Chair:* P. Diamond	
8:40	C. Hidalgo	On the coupling between flows and turbulence (20+5)
9:05	L. Schmitz	Shear flow and turbulence suppression in limit cycle oscillations preceding the L-H transition (15+5)
9:25	K. Zhao	Spatial structure and interaction of multiple shear flow populations in tokamak edge turbulence (15+5)
9:45	G. Conway (C. Angioni)	Interaction of GAM zonal flows, mean flows and edge turbulence across the L-H transition in ASDEX upgrade (15+5)
10:05-10:25		*BREAK - Mission Bay Ballroom*
10:25-11:45	*Chair:* P. Diamond	
10:25	Y. Sechrest	Interactions between turbulence and flows in the NSTX edge (15+5)
10:45	W.W. Xiao	Dynamics and feedback loops of particle ITB formation in OH-plasma (15+5)
11:05	P. Mantica	Ion stiffness mitigation as a key for improved core ion confinement: experimental results in JET and theoretical investigations (15+5)
11:25	C. Fiore	Intrinsic plasma rotation in C-Mod internal transport barriers (15+5)
11:45-1:10		*LUNCH*
1:10-2:30	*Chair:* G. Tynan	
1:10	H. Yuh	Reversed shear internal transport barriers in the National Spherical Torus Experiment (15+5)
1:30	J. Peterson	Nonlinear gyrokinetic simulations of electron internal transport barriers in the National Spherical Torus Experiment (15+5)
1:50	G.S. Xu	First H-mode with lower-hybrid current drive and lithium-wall coatings on the EAST superconducting tokamak (15+5)
2:10	S.W. Yoon (S.H. Hahn)	Preliminary results of the first H-mode discharges in KSTAR (15+5)
2:30-3:15	P. Diamond/G. Tynan	Discussion
3:15-3:30		*BREAK - Bayside Pavilion*
3:30-5:45		Poster Session – (Bayside Pavilion)
6:30-9:30		Reception / Dinner –
6:30-6:45		Board Boat
6:45		Depart from Bahia
7:00-7:30		Drinks at Catamaran
7:30-9:00		Dinner and Show (show starts at 8)
9:15		Depart for Bahia

Date Thursday, April 7, 2011		
Plenary Session II – Transport at Finite and High Beta		**Plenary Presentations (Mission Bay Ballroom ED)**
8:30-10:00	*Chair:* W. Nevins	
8:30	C. Angioni	Electromagnetic effects in momentum and particle transport
9:00	W. Ding	Finite pressure effects on momentum transport in a toroidal plasma
9:30	P. Diamond/W. Nevins	Discussion on momentum transport at finite beta
10:00-10:15		*BREAK - Mission Bay Ballroom*
10:15-12:15	*Chair:* W. Nevins	
10:15	F. Jenko (M. Pueschel)	Turbulent transport at finite-β: Recent developments in gyrokinetics
10:45	W. Guttenfelder	Electromagnetic transport from microtearing mode turbulence in NSTX
11:15	D. Hatch	Development of magnetic stochasticity due to subdominant modes
11:45	W. Nevins	Discussion on finite-beta gyrokinetics
12:15-1:45		*LUNCH*
1:45-3:15	*Chair:* W. Nevins	
1:45	K. Ida	Topology bifurcation of magnetic flux surface in plasmas
2:15	K. Tritz	Effects of global Alfven eigenmodes on electron thermal transport in NSTX
2:45	K. Ida/W. Nevins	Discussion on magnetic stochasticity and transport
3:15 -3:30		*BREAK - Bayside Pavilion*
3:30-6:00		Poster Session (Bayside Pavilion)

Date Friday, April 8, 2011		
Core Transport Working Sessions and Discussion (Shell)		
8:30-9:50	*Chair*: D. Newman	**Session I – Turbulent Transport and Barriers**
8:30	M. Austin	Core transport barriers in DIII-D discharges with off-axis ECH (15+5)
8:50	J. Dorris	Turbulent transport studies in Alcator C-Mod ohmic plasmas (15+5)
9:10	A. Garofalo	Confinement Improvement with Higher Beta in Low NBI Torque QH-mode Discharges (15+5)
9:30	E. Doyle	Particle transport measurements on DIII-D using perturbative techniques (15+5)
9:50-10:20		*BREAK - Bayside Pavilion*
10:20-12:10	*Chair*: D. Newman	**Session II – ITBs and Fluctuations**
10:20	D. Ernst	Controlling fluctuations in an ITB with on-axis ICRF heating (15+5)
10:40	G. McKee	Dependence of turbulence and transport on Te/Ti and comparison with transport models (15+5)
11:10	C. Bourdelle	Collisionality scaling in Tore Supra: on the uncertainties of global and local energy confinement analysis (15+5)
11:30	L. Vermare	Evolution of micro-turbulence characteristics with collisionality at the tokamak core-edge interface (15+5)
11:50	D. Newman	Discussion
12:10-1:20		*LUNCH*
1:20-3:00	*Chair*: G. McKee	**Session III – Turbulent Transport Fundamentals**
1:20	W. Nevins	How microturbulence breaks magnetic surfaces (15+5)
1:40	P. Terry	Features of Saturation of Ion Temperature Gradient Turbulence by Damped Modes in Gyrokinetic Models (15+5)
2:00	W. Wang	Electrostatic turbulence driven plasma current (15+5)
2:20	L. Zhao	Collisionless turbulent heating and inter-species energy transfer in CTEM turbulence (15+5)
2:40	G. McKee	Discussion
3:00-3:30		*BREAK - Bayside Pavilion*
3:30-5:30	*Chair*: P. Terry	**Session IV – Basic Turbulence Physics**
3:30	D. Dickenson	Probing the linear structure of toroidal drift modes (15+5)
3:50	A. Sen	ETG mode driven electron thermal transport and scaling in a basic experiment (15+5)
4:10	S. Kumar	Classical transport of impurity ions in the reversed field pinch (15+5)
4:30	H. Sun	New development in non-locality in transport (15+5)
4:50	P. Terry	Discussion

Date Sat. April 9, 2011		
Core Working Sessions and Discussion (Shell)		
8:50 – 9:50	*Chair:* D. Newman	**Session V – Modeling**
8:50	A. Kritz	Improved multi-mode anomalous transport model (15+5)
9:10	A. Hakim	Implementation of and first results from FACETS embedded core turbulence transport solver (15+5)
9:30	T. Rafiq	Simulating ITER target steady state and hybrid plasma using multi-mode version 7.1 and GLF23 transport models (15+5)
9:50-10:20		*BREAK – Bayside Pavilion*
10:20-12:10	*Chair*: G. McKee	**Session VI – Comparison with Experiment**
10:20	N. Howard	Experimental and gyrokinetic comparison of L, I, and H-mode impurity transport (15+5)
10:40	K. Tanaka	Core turbulence and comparison with gyro kinetic simulation in high Ti discharge of LHD (15+5)
11:00	G. Colyer	Simulating thermal energy transport in MAST using Trinity and GS2 (15+5)
11:20	P. Porazik	Compressional magnetic fluctuations in Gyrokinetics (15+5)
11:40-12:10	G. McKee	Discussion

Date Friday, April 8, 2011		
Edge Physics Working Sessions and Discussion (Mission Bay Ballroom ED)		
8:40 – 10:00	*Chair:* R. Groebner	**Session I – L-H Threshold**
8:40	F. Ryter	Study of the L-H transition at low density in ASDEX Upgrade (15+5)
9:00	D. Battaglia	Dependence of the L-H power threshold on the X-point radius in NSTX (15+5)
9:20	Z. Yan	The dynamics of turbulence, zonal flows and the Reynolds stress approaching the L-H transition (15+5)
9:40	K. Miki	Multiple states of broadband frequency shearing in a self-consistent one-dimensional edge turbulence model (15+5)
10:00-10:30		*BREAK – Mission Bay Ballroom*
10:30-12:15	*Chair*: R. Maingi	**Session II – JRT: Pedestal Physics Elements**
10:30	S. Parker	Global gyrokinetic turbulence simulations of the edge pedestal (15+5)
10:50	E. Wang	Gyrokinetic analysis of linear instabilities within the pedestal of experimental discharges (15+5)
11:10	Z. Wang	Gyrokinetic particle simulation of ideal and kinetic ballooning modes (15+5)
11:30	C.S. Chang	Kinetic effects on edge pedestal and their implications for experimental investigations (15+5)
11:50	R. Groebner/R. Maingi	Discussion
12:15 – 1:30		*LUNCH*
1:30-3:00	*Chair*: T. Rognlien	**Session III – JRT: Pedestal Physics Elements, ELMs**
1:30	J. Callen	Pedestal structure model tests (15+5)
1:50	A. Pankin	Computational study of transport mechanisms in H-mode pedestal of tokamak plasmas (15+5)
2:10	N. Fedorczak	3D turbulence in tokamak scrape-off layers and consequences for core rotation (15+5)
2:30	L. Zeng	Effects of magnetic field perturbations on density profiles, particle transport and turbulence in DIII-D (15+5)
3:00-3:30		*BREAK – Bayside Pavilion*
3:30-5:30	*Chair*: J. Callen	**Session IV – JRT: ELMs**
3:30	X. Xu	Zonal field generation in ELMy H-mode discharges (15+5)
3:50	T. Rognlien	Neutral and plasma particle transport during the ELM-cycle: toward a dynamic pedestal/SOL model (15+5)
4:10	J. Cummings	Coupled kinetic-MHD simulations of ELM effects and divertor heat loads (15+5)
4:30	S. Zweben	2-D Analysis of edge turbulence velocity and blobs in Alcator C-Mod (15+5)
4:50-5:30	T. Rognlien/J. Callen	Discussion

Date Saturday April 9, 2011		
Edge Physics Working Sessions and Discussion (Mission Bay Ballroom ED)		
8:40 – 9:50	*Chair:* R. Groebner	**Session V – Edge/SOL Fluctuations**
8:40	M. Agostini	Edge turbulence in different density regimes in Alcator C-Mod (15+5)
9:00	J. Dong	Direct observation of large scale coherent structures in edge and scrape-off layer plasmas of HL-2A (15+5)
		Session VI – Benevolent Fluctuations
9:20	A. Dominguez	I-mode regime and characterization of the Weakly Coherent Mode (WCM) in Alcator C- Mod (15+5)
9:40	K. Burrell	Beneficial effects of the Edge Harmonic Oscillation in Quiescent H-mode plasmas (15+5)
10:00-10:30		*BREAK – Mission Bay Ballroom*
10:30-12:10	*Chair*: C.S. Chang	**Session VI – Benevolent Fluctuations**
10:30		
10:50	D. Russell	Reduced-model (SOLT) simulations of an EDA H-mode shot at C-Mod (15+5)
11:10	L. Zheng	Infernal modes at tokamak H-mode pedestal (15+5)
11:30-12:10	R. Groebner/C.S. Chang	Discussion

Date Friday, April 8, 2011		
Momentum (Ventana)		
8:30-10:30	*Chair:* P. Diamond	**Session I - Momentum and Particle Transport**
8:30	P. Diamond	Critical Issues in Intrinsic Rotation Bifurcations (25+5)
9:00	Y. Kosuga	Entropic theory of the efficiency of intrinsic rotation drive (15+5)
9:20	W. Solomon	Measurement & modeling of intrinsic torque on DIII-D (15+5)
9:40	J. Rice	Observations of core rotation reversals in Alcator C-Mod ohmic L-mode plasmas (15+5)
10:00–10:30		*BREAK – Bayside Pavilion*
10:30–12:00	*Chair*: J. Rice	**Session II - Momentum and Particle Transport**
10:30	J.M. Kwon	Gyrokinetic simulation study of micro-physics for symmetry breaking and intrinsic rotation generation in electrostatic turbulence (15+5)
10:50	Y. Podpaly	The dependence of LHCD-induced rotation direction on plasma current (15+5)
11:10	H. Jhang	Role of intrinsic and external torque in ion profile de-stiffening and transport barrier formation: a gyrofluid simulation study (15+5)
11:30-12:00		Discussion
12:00 – 1:30		*LUNCH*
1:30 – 3:00	*Chair*: W. Solomon	**Session III - Momentum and Particle Transport**
1:30	B. Grierson	Core measurements of the thermal deuterium ion temperature and toroidal rotation in DIII-D (25+5)
2:00	G. Dif-Pradalier	Rotation and staircases in tokamaks: on the hierarchy of flows near criticality (15+5)
2:20	I. Holod	Turbulent transport of toroidal angular momentum in drift wave turbulence (15+5)
2:40	T. Tala	NBI modulation experiments to study magnetic field ripple torque and momentum transport on JET (15+5)
3:00-3:30		*BREAK – Bayside Pavilion*
3:30–5:00	*Chair:* P. Diamond	**Session IV - Momentum and Particle Transport**
3:30	P. Manz	Cooperative elliptical instability and plasma blob generation (15+5)
3:50	C. McDevitt	A simple model for turbulence driven poloidal rotation in the vicinity of a transport barrier (15+5)
4:10	J. Weiland	Comparison of external and internal transport barriers in drift wave predictive simulations (15+5)
4:30	Diamond/Rice/Solomon	Discussion

Date Friday, April 8, 2011		
Energetic Particles Working Group Sessions and Discussion (Del Mar)		
8:30-10:15	*Chair*: B. Breizman	**Session I**
8:30	E.M. Hollmann	Progress on studies of runaway electrons formed during tokamak disruptions (22+8)
9:00	D. Darrow	Measurements and modeling of neutral beam ion loss during TAE avalanches in NSTX (18+7)
9:25	G.Y. Fu	M3D-K simulations of beam-driven Alfvén modes in NSTX (18+7)
9:50	C. Muscatello	Velocity-space studies of fast-ion transport at a sawtooth crash (18+7)
10:15-10:30		*BREAK – Bayside Pavilion*
10:30-12:10	*Chair*: W. Heidbrink	**Session II**
10:30	R. Nazikian	Nonlinear evolution and radial propagation of the energetic particle-induced Geodesic Acoustic Mode (18+7)
10:55	G. Kramer	Simulation of observed EGAM induced beam-ion losses in DIII-D (18+7)
11:20	E.M. Bass	A gyrokinetic study of Global Alfvén Eigenmodes (18+7)
11:45	R.E. Waltz	Program for finding the upper bound on unstable Alfvén mode induced fusion alpha transport losses (18+7)
12:10-1:30		*LUNCH*
1:30 – 3:35	*Chair*: G.Y. Fu	**Session III**
1:30	W.W. Heidbrink	Characterization of off-axis fishbones (18+7)
1:55	G. Wang	Model for spontaneous frequency sweeping of an Alfvén wave in a toroidal plasma (18+7)
2:20	B. Breizman	Modeling of long-range frequency sweeping phenomena (18+7)
2:45	H.S. Zhang	Nonlinear gyrokinetic particle simulation of beta-induced Alfvén eigenmode (18+7)
3:10	W. Deng	Effects of finite beta and plasma current on the reversed shear Alfvén eigenmode (18+7)
3:35 – 3:50		*BREAK – Bayside Pavilion*
3:50 – 5:30	*Chair*: B. Breizman	**Session IV**
3:50	S. Zhou	Study of fast ion transport in turbulent waves in the Large Plasma Device LAPD (18+7)
4:15	J. Lang	M3D-K simulation of beam-driven Alfvén modes in DIII-D (18+7)
4:40	Y. Chen	Simulation of Reversed Shear Alfvén Eigenmodes using a gyrokinetic ion/fluid electron hybrid model (18+7)
5:05	D.A. Spong	Recent development of energetic particle gyro-Landau fluid models (18+7)

Date Saturday, April 9, 2011		
3D Physics (Del Mar)		
8:30 – 12:30	*Chair:* K. Ida	**Session I – 3D Effects on viscosity and flows**
8:30	K. Ida	Overview of 3D effects on viscosity and flows (25+5)
9:00	R. Wilcox	Measurements of bicoherence and long-range correlations during biasing in the HSX stellarator (15+5)
9:20	W. Bergerson	Transition to a helical core equilibrium in a toroidal plasma
9:40	S. Ohdachi	Formation and termination of particle transport barrier in LHD (15+5)
10:00	G. Birkenmeir	Experimental investigations of turbulence transport asymmetries and 3D structure of edge turbulence (15+5)
10:20-10:40		*BREAK – Bayside Pavilion*
10:40-12:20	*Chair*: K. Ida	**Session II – Effects on turbulence spreading**
10:40	O. Gurcan	Overview on turbulence spreading (25+5)
11:10	T. Estrada	Evidence of turbulence spreading in the TJ-II stellarator (15+5)
11:30	M. LeConte	Effect of Resonant Magnetic Perturbations on Secondary Structures in Drift Wave Turbulence
11:50	P. Diamond	Development in the theory of turbulence spreading with self-consistent flows (15+5)
12:10-12:25	K. Ida	Discussion

Date Saturday, April 9, 2011		
V&V/FSP Working Group Sessions and Discussion (Ventana)		
8:30-10:10	*Chair*: P. Terry	**Session I – Verification and Validation**
8:30	C. Holland	Ensemble-based validation metrics for turbulent rransport modeling
8:50	J. Loizu	The validation project on the TORPEX basic plasma physics experiment
9:10	W. Horton	Electron temperature gradient turbulence validation in the Columbia Linear Machine
9:30	R. Bravenec	Linear and nonlinear verification of gyrokinetic microstability codes
9:50	P. Terry	Discussion (20 min)
10:10-10:40		*Break – Bayside Pavilion*
10:40-12:25	*Chair*: D. Brennan	**Session II – Fusion Simulation Project**
10:40	G. Tynan	Role of the TTF in advancing the FSP (10+5)
10:55	C. Holland	Plans for validation in FSP (10+5)
11:10	C.S. Chang	Integrated kinetic simulations of edge dynamics in tokamaks (15+5)
11:30	S. Kruger	Software integration featuring FACETS (15+5)
11:50	A. Kritz	Current status of whole device modeling for tokamaks (15+5)
12:10	D. Brennan	Discussion (15 min)

POSTER SESSIONS – Wednesday, April 6, 2011			
Poster Sessions (Bayside Pavilion)			
3:30-5:45	Session I:		
	P1	S. Moradi	A theory of non-local linear drift wave transport
	P2	R. Groebner	Development of experimental plan to test pedestal physics processes
	P3	S. Koh	Numerically improved bootstrap current formula for more proper pedestal physics validation
	P4	R. Maingi	Edge transport and turbulence reduction, and the formation of wide pedestals with lithium coatings in NSTX
	P5	P. Snyder	Developing and testing the EPED pedestal model as part of the 2011 Joint Research Target
	P6	G. Yun	Growth, saturation and burst of edge-localized filaments in KSTAR
	P7	R. Churchill	In-out B5+ impurity asymmetries in the pedestal region on Alcator C-Mod
	P8	A. Diallo	Evolution of the pedestal structure in ELMy H-mode in NSTX
	P9	M. Dorf	Status of the COGENT Edge Kinetic Code
	P10	J. Rost	Study of the poloidal variation and spectral structure of short-wavelength edge turbulence using phase xontrast imaging on DIII-D
	P11	S. Smith	Testing paleoclassical predictions against measured DIII-D pedestal profiles
	P12	D. Stotler	Consistent recycling in a coupled kinetic plasma - neutral transport code
	P13	J. Walk	Experimental Tests of the EPED model for ELMy H-mode pedestals on Alcator C-Mod
	P14	W. Wan	Gyrokinetic particle simulations of edge pedestal turbulence
	P15	I. Cziegler	Experimental studies of the Quasi- and the Weakly-Coherent-Modes in Alcator C-Mod
	P16	J. Myra	Linear stability analysis of an EDA H-mode edge plasma: A quest for the Quasi-Coherent Mode
	P17	D. Auerbach	Control of gradient-driven instabilities using shear Alfven beat-waves
	P18	A. Aydemir	A model to explain certain L-H transition power threshold differences
	P19	T. Estrada	Coupling between turbulence and flows during the L-H transition
	P20	S. Kubota	Measurements of broad-kr microturbulence near the L-H transition in NSTX using FMCW reflectometry and backscattering
	P21	Y. Ma	Experimental studies of L-H confinement transition on Alcator C-Mod
	P22	M. Malkov	Effects of particle deposition profile on L-H transition and hysteresis dynamics
	P23	M. Xu	Proposed nonlinear energy transfer, momentum transport, and hysteresis experiments on HL-2A
	P24	W. Xiao	Type III ELM suppression using Supersonic Molecular Beam Injection in HL-2A tokamak
	P25	D. Baver	ELM modeling using the 2DX eigenvalue code
	P26	T. Gray	Relationship between ELM size and transport speed through the scrape-off layer in NSTX
	P27	M. Agostini	Role of the pressure gradient in the generation and evolution of the plasma edge turbulence in RFX-mod
	P28	D. D'Ippolito	Sheared flow dynamics in edge turbulence
	P29	B. Friedman	Excitation of dtable eigenmode branches in a model of LAPD turbulence
	P30	M. Yagi	Simulation study on non-local transport by plasma blob in SOL
	P31	J. Loizu	Boundary conditions for plasma fluid models at the magnetic presheath entrance
	P32	T. Petrie	Toward effective heat flux reduction combining resonant magnetic perturbations with a radiating divertor in DIII-D
	P33	M. Umansky	Modeling of Langmuir probe effects locally induced in tokamak edge plasma
	P34	A. Bortolon	Effect of low frequency MHD on the fast ion population in NSTX plasmas based on FIDA observations
	P35	K. Liao	Fast ion and thermal helium transport experiments in Alcator C-Mod
	P36	F. Hinton	Effect of superbanana diffusion on fusion reactivity in stellarators
	P37	E. Chen	Free-boundary Toroidal Alfven Eigenmodes
	P38	E. Fredrickson	Formation of long-lived phase space structures by high frequency Alfven Eigenmodes through the Doppler-shifted cyclotron resonance
	P39	M. Podesta	Characterization of chirping TAE modes on NSTX
	P40	N. Crocker	High resolution global mode structure measurements via multichannel reflectometry in NSTX

POSTER SESSIONS -			
Date Thursday, April 7, 2011			
Poster Sessions (Bayside Pavilion)			
3:30-6:00	Session II:		
	P1	V. Berionni	Predator prey oscillations in a simple cascade model of drift wave turbulence
	P2	I. Bespamyatnov	Impurity effects on the ITB in Alcator C-Mod
	P3	D. Brower	Role of density fluctuations and fluctuation-induced transport in a stochastic magnetic field
	P4	I. Chavdarovski	Current density in turbulent magnetically confined plasmas
	P5	D. Clayton	Impurity ransport measurements with the new multi-energy soft-x- ray diagnostic on NSTX
	P6	J. DeBoo	Electron profile stiffness in L-mode discharges in DIII-D
	P7	D. Demers	Advances in heavy ion beam probe measurements of fluctuations in improved confinement Madison Symmetric Torus reversed-field pinch plasmas
	P8	C. Gao	Experiment on ion heat transport and rotation study with X-ray spectroscopy at Alcator C-Mod
	P9	K. Gentle	Turbulent structures and turbulence suppression in the Helimak
	P10	E. Granstedt	Transport predictions for density-gradient-dominated regimes
	P11	J. Hillesheim	Geodesic acoustic mode and zonal flow measurements in DIII-D
	P12	J. Kinsey	Quantifying the stiffness of TGLF in DIII-D
	P13	B. LeBlanc	HHFW power deposition in NBI heated NSTX plasmas
	P14	D. Mikkelsen	GYRO simulations of yurbulently driven density peaking in C-Mod plasmas
	P15	H. Mynick	Reduced turbulent transport in toroidal configurations through shaping
	P16	C. Petty	Beta Scaling of Turbulence and Transport
	P17	F. Poli	Performance and stability of ITER steady state plasmas with ITBs
	P18	I. Pusztai	Isotope mass and charge effects in tokamak plasmas
	P19	Y. Ren	Study of parametric dependence of high-k turbulence with microwave scattering on NSTX
	P20	D. Smith	Density fluctuation measurements from the NSTX Beam Emission Spectroscopy diagnostic system
	P21	J. Zhang	Low frequency MHD modes study on NSTX
	P22	C. Shao	DIII-D microwave imaging reflectometer (MIR) design criteria and performance parameters evaluated by full-wave synthetic diagnostic
	P23	G. Staebler	Centrifugal effects on gyro-kinetic stability and transport
	P24	T. Vernay	Collisional and electromagnetic simulations with the global gyrokinetic delta-f particle-in-cell code ORB5
	P25	B. Weyssow	Electron transport: presentation of the first results of the EFDA TTG collaborative activity
	P26	Y. Xiao	Convective motion in collisionless trapped electron mode turbulence
	P27	W. Horton for S. Fu	Impurity turbulent transport studies using gyro-fluid models
	P28	P.-C. Hsu	Origin of irreversibility in vorticity transport and its role in zonal flow generation
	P29	C.-B. Kim	Plasma advection due to noise
	P30	J. Kim	Turbulence suppression in a coherent structure of localized current and vorticity
	P31	S.-H. Ku	Numerical 'Solomon' experiment of intrinsic momentum torque in fux-driven global ITG turbulence
	P32	S. Mueller	Intrinsic rotation generation in DIII-D ELM-free H-mode plasmas
	P33	D. Schaffner	A spectral analysis for mode identification on LAPD edge turbulence
	P34	S. Thakur	Effect of boundary conditions on drift turbulence and zonal flows in a linear plasma device
	P35	S. Yi	Role of non-resonant modes in zonal flows and intrinsic rotation generation
	P36	T. Carter	Status and plans for validation of turbulence simulation against LAPD data
	P37	S. Vadlamani	Progress of parallel validation tools for fusion simulations as applied to synthetic diagnostic efforts
	P38	M. Shafer	Edge Soft X-ray imaging and inversion techniques for measurement of magnetic topology from external 3-D magnetic perturbations
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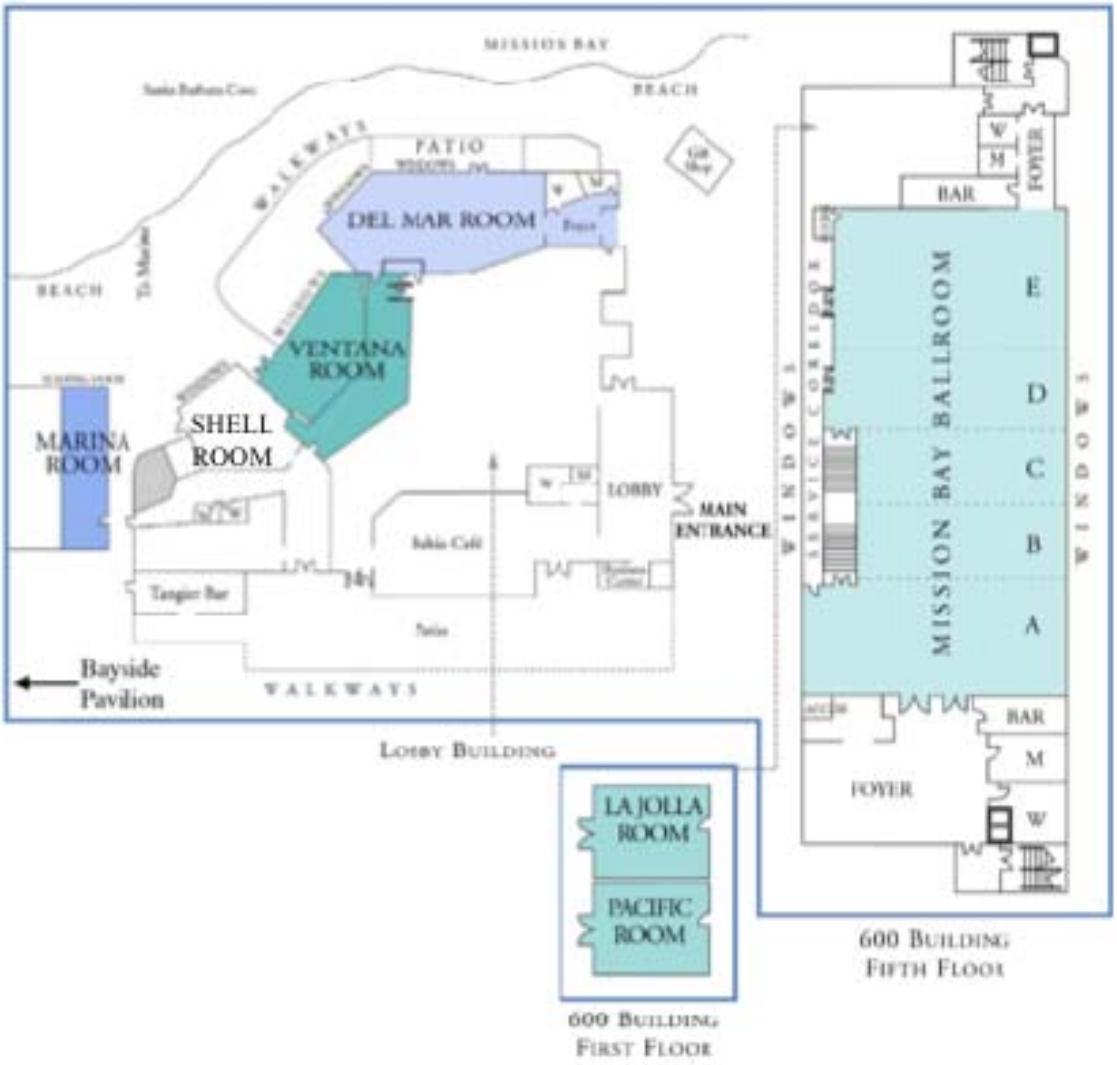
Bahia Meeting Rooms



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TTF Program Committees

TTF Executive Committee

- Stanley Kaye (Chair) skaye@pppl.gov
- George Tynan (Dep. Chair) gtynan@ucsd.edu
- Clemente Angioni cla@rzg.mpg.de
- Boris Breizman breizman@mail.utexas.edu
- C.S. Chang cschang@cims.nyu.edu
- Pat Diamond diamondph@gmail.com
- Xavier Garbet xavier.garbet@cea.fr
- Punit Gohil gohil@fusion.gat.com
- N. N. Gorelenkov ngorelen@pppl.gov
- Richard Groebner groebner@fusion.gat.com
- William Heidbrink bill.heidbrink@uci.edu
- Carlos Hidalgo carlos.hidalgo@ciemat.es
- Katsumi Ida ida@nifs.ac.jp
- Rajesh Maingi rmaingi@pppl.gov
- George McKee mckee@fusion.gat.com
- Bill Nevins nevins1@llnl.gov
- David Newman ffden@uaf.edu
- John Rice rice@psfc.mit.edu
- Raul Sanchez sanchezferlr@ornl.gov
- Wayne Solomon solomon@fusion.gat.com
- Paul Terry pwterry@wisc.edu
- Masatoshi Yagi yagi@riam.kyushu-u.ac.jp

Conference Organizing Committee

- Stanley Kaye kaye@pppl.gov
- Punit Gohil gohil@fusion.gat.com
- Kathleen Lukazik lukazik@pppl.gov
- Valerie Censabella censabella@psfc.mit.edu

2011 TTF PARTICIPANTS

Name	Affiliation	Email Address	Country
Agostini, Matteo	Consorzio RFX	matteo.agostini@igi.cnr.it	Italy
Angioni, Clemente	IPP Garching	clemente.angioni@ipp.mpg.de	Germany
Auerbach, David	UCLA	dauerbac@ucla.edu	USA
Austin, Max	The Univ. of Texas at Austin	max.austin@gat.com	USA
Aydemir, Ahmet	Institute for Fusion Studies	aydemir@mail.utexas.edu	USA
Barredo, Jose Miguel Reynolds	Univ. of Alaska	jmrb2002@gmail.com	USA
Barton, Joseph	UCSD	jbarton@ucsd.edu	USA
Bass, Eric	General Atomics	bassem@fusion.gat.com	USA
Battaglia, Devon	ORNL	dbattagl@pppl.gov	USA
Baver, Derek	Lodestar Research Corporation	dabaver65@hotmail.com	USA
Bergerson, William	UCLA	wfbergerson@ucla.edu	USA
Berionni, Vincent	LPP CNRS	vincent_berionni@orange.fr	France
Berk, Herbert	Institute for Fusion Studies	hberk@mail.utexas.edu	USA
Bespamyatnov, Igor	The Univ. of Texas at Austin	igorbest@gmail.com	USA
Birkenmeier, Gregor	Institut fuer Plasmaforschung	birkenmeier@ipf.uni-stuttgart.de	Germany
Bortolon, Alessandro	UC Irvine	abortolo@pppl.gov	USA
Bourdelle, Clarisse	Association Euratom CEA	clarisse.bourdelle@cea.fr	France
Bravenec, Ron	Fourth State Research	rvbravenec@4th-state.com	USA
Breizman, Boris	University of Texas	breizman@mail.utexas.edu	USA
Brennan, Dylan	University of Tulsa	dylan-brennan@utulsa.edu	USA
Briesemeister, Alexis	Univ. of Wisconsin Madison	arbriesemeis@wisc.edu	USA
Brower, David	UCLA	brower@ucla.edu	USA
Burrell, Keith	General Atomics	Burrell@fusion.gat.com	USA
Callen, Jim	Univ. of Wisconsin Madison	callen@engr.wisc.edu	USA
Carter, Troy	UCLA	tcarter@physics.ucla.edu	USA
Casper, Thomas	ITER Organization	thomas.casper@iter.org	France
Chang, Choongseok	PPPL	cschang@pppl.gov	USA
Chavdarovski, Ilija	NFRI	chavdarovski@gmail.com	S. Korea
Chen, Eugene	University of Texas	eyc@mail.utexas.edu	USA
Chen, Yang	Univ. of Colorado at Boulder	ychen0305@yahoo.com	USA
Choi, Myunghee	General Atomics	choi@fusion.gat.com	USA
Chrystal, Colin	UCSD	colin.chrystal@gmail.com	USA
Churchill, Michael	MIT PSFC	rmchurch@mit.edu	USA
Clayton, Daniel	Johns Hopkins University	dclayton@pppl.gov	USA
Colyer, Greg	CCFE	greg.colyer@ccfe.ac.uk	UK
Crocker, Neal	UCLA	ncrocker@physics.ucla.edu	USA
Cummings, Julian	Caltech	cummings@cacr.caltech.edu	USA
Darrow, Douglass	PPPL	ddarrow@pppl.gov	USA
DeBoo, Jim	General Atomics	deboo@fusion.gat.com	USA
Demers, Diane	Xantho Technologies	xanthotechnologies@yahoo.com	USA
Deng, Wenjun	UC Irvine	wdeng@uci.edu	USA
Diallo, Ahmed	PPPL	adiallo@pppl.gov	USA
Diamond, Pat	NFRI	diamondph@gmail.com	S. Korea

Dickinson, David	University of York	dd502@york.ac.uk	UK
Dif-Pradalier, Guilhem	UCSD	gdifpradalier@ucsd.edu	USA
Ding, Weixing	UCLA	wding@ucla.edu	USA
Dippolito, Dan	Lodestar Research	dippolito@lodestar.com	USA
Dominguez, Arturo	MIT PSFC	arturod@mit.edu	USA
Dong, Jiaqi	Southwestern Institute of Phys	jiaqi@swip.ac.cn	China
Dorf, Mikhail	LLNL	dorf1@llnl.gov	USA
Dorris, James	MIT PSFC	dorris@fusion.gat.com	USA
Doyle, Edward	UCLA	edoyle@ucla.edu	USA
Eckstrand, Stephen	DOE Office of Science	steve.eckstrand@science.doe.gov	USA
Ernst, Darin	MIT	dernst@psfc.mit.edu	USA
Estrada, Teresa	EURATOM-CIEMAT	teresa.estrada@ciemat.es	Spain
Fedorczak, Nicolas	Center for Energy Research	nfedorczak@ucsd.edu	USA
Fiore, Catherine	MIT PSFC	fiore@psfc.mit.edu	USA
Fredrickson, Eric	PPPL	efredrickson@pppl.gov	USA
Friedman, Brett	UCLA	friedman@physics.ucla.edu	USA
Fu, Guoyong	PPPL	fu@pppl.gov	USA
Gao, Chi	MIT PSFC	cgao@mit.edu	USA
Garofalo, Andrea	General Atomics	garofalo@fusion.gat.com	USA
Gentle, Kenneth	The Univ. of Texas at Austin	k.gentle@mail.utexas.edu	USA
Gobbin, Marco	Consorzio RFX	marco.gobbin@igi.cnr.it	Italy
Gohil, Punit	General Atomics	gohil@fusion.gat.com	USA
Gosselin, Jordan	UCSD	jgosselin@physics.ucsd.edu	USA
Granstedt, Erik	PPPL	erikg@pppl.gov	USA
Gray, Travis	ORNL	tkgray@pppl.gov	USA
Grierson, Brian	PPPL	bgriers@pppl.gov	USA
Groebner, Richard	General Atomics	groebner@fusion.gat.com	USA
Gurcan, Ozgur	LPP CNRS	ozgur.gurcan@cea.fr	France
Guttenfelder, Walter	PPPL	wgutten@pppl.gov	USA
Hahn, Sang-hee	NFRI	hahn76@nfri.re.kr	S. Korea
Hakim, Ammar	Tech-X Corporation	ammar@txcorp.com	USA
Hatch, David	IPP Garching	davidhat@ipp.mpg.de	Germany
Heidbrink, Bill	UC Irvine	Bill.Heidbrink@uci.edu	USA
Hidalgo, Carlos	EURATOM-CIEMAT	carlos.hidalgo@ciemat.es	Spain
Hillesheim, Jon	UCLA	jchillesheim@physics.ucla.edu	USA
Hinton, Fred	UCSD	fhinton@ucsd.edu	USA
Holland, Chris	UCSD	chholland@ucsd.edu	USA
Hollmann, Eric	UCSD	ehollmann@ucsd.edu	USA
Holod, Ihor	UCI	iholod@uci.edu	USA
Horton, Wendell	Institute for Fusion Studies	horton@physics.utexas.edu	USA
Houlberg, Wayne	ITER Organization	wayne.houlberg@iter.org	France
Howard, Nathan	MIT PSFC	nthoward@psfc.mit.edu	USA
Hsu, Pei-Chun	UCSD	peihsu@physics.ucsd.edu	USA
Hughes, Jerry	MIT PSFC	jwhughes@psfc.mit.edu	USA
Ida, Katsumi	NIFS	ida@nifs.ac.jp	Japan
Jhang, Hogun	NFRI	hgjhang@nfri.re.kr	S. Korea

Joseph, Ilon	LLNL	joseph5@llnl.gov	USA
Kaye, Stanley	PPPL	kaye@pppl.gov	USA
Kim, Chang-Bae	Soongsil University	cbkim@ssu.ac.kr	S. Korea
Kim, Juhyung	Univ. of Wisconsin Madison	jkim282@wisc.edu	USA
Kim, Kyuho	KAIST	dogkyo@gmail.com	S. Korea
Kinsey, Jon	General Atomics	kinsey@fusion.gat.com	USA
Koh, Sehoon	KAIST	shkoh@kaist.ac.kr	S. Korea
Kosuga, Yusuke	UCSD	yukosuga@physics.ucsd.edu	USA
Kramer, Gerrit	PPPL	gkramer@pppl.gov	USA
Kritz, Arnold	Lehigh University	kritz@lehigh.edu	USA
Kruger, Scott	Tech-X	kruger@txcorp.com	USA
Ku, Seung-Hoe	New York University	sku@cims.nyu.edu	USA
Kubota, Shige	UCLA	skubota@ucla.edu	USA
Kumar, Santhosh	Univ. of Wisconsin Madison	stkumar@wisc.edu	USA
Kwon, Jae-Min	NFRI	jmkwon74@nfri.re.kr	S. Korea
Lang, Jianying	PPPL	jlang@pppl.gov	USA
LeBlanc, Benoit	PPPL	leblanc@pppl.gov	USA
Leconte, Michael	NFRI	mleconte@nfri.re.kr	S. Korea
Liao, Kenneth	The Univ. of Texas at Austin	kenliao@physics.utexas.edu	USA
Liubing, Yu	UC Davis	lbyu@ucdavis.edu	USA
Loizu, Joaquim	EPFL-CRPP	joaquim.loizu@epfl.ch	Switzerland
Ma, Yunxing	MIT PSFC	yma@psfc.mit.edu	USA
Maingi, Rajesh	ORNL	rmaingi@pppl.gov	USA
Malkov, Mikhail	UCSD	mmalkov@ucsd.edu	USA
Mandrekas, John	U.S. Department of Energy	john.mandrekas@science.doe.gov	USA
Mantica, Paola	IFP CNR-ENEA	mantica@ifp.cnr.it	Italy
Manz, Peter	UCSD	pmanz@ucsd.edu	USA
McDevitt, Chris	LPP CNRS	cjmcdevitt@google.com	France
McKee, George	Univ. of Wisconsin Madison	mckee@fusion.gat.com	USA
Miki, Kazuhiro	NFRI	kmiki@nfri.re.kr	S. Korea
Mikkelsen, David	PPPL	mikk@pppl.gov	USA
Moradi, Sara	CTH	sara@nephy.chalmers.se	Sweden
Mueller, Stefan	UCSD	shmueller@gmail.com	USA
Muscatello, Chris	UC Irvine	c.muscatello@uci.edu	USA
Mynick, Harry	PPPL	mynick@pppl.gov	USA
Myra, James	Lodestar Research Corp	jrmyra@lodestar.com	USA
Nazikian, Raffi	PPPL	rnazikian@pppl.gov	USA
Nevins, Bill	LLNL	nevins@llnl.gov	USA
Newman, David	Univ. of Alaska	denewman@alaska.edu	USA
Ohdachi, Satoshi	NIFS	ohdachi@nifs.ac.jp	Japan
Pankin, Alexei	Tech-X Corp.	pankin@txcorp.com	USA
Parker, Scott	Univ. of Colorado	sparker@colorado.edu	USA
Peterson, Jayson Luc	PPPL	jpeterso@pppl.gov	USA
Petrie, Thomas	General Atomics	petrie@fusion.gat.com	USA
Petty, Craig	General Atomics	petty@fusion.gat.com	USA
Podesta, Mario	PPPL	mpodesta@pppl.gov	USA

Podpaly, Yuri	MIT PSFC	ypodpaly@mit.edu	USA
Poli, Francesca	PPPL	fpoli@pppl.gov	USA
Porazik, Peter	UC Irvine	pporazik@uci.edu	USA
Porkolab, Miklos	MIT	porkolab@psfc.mit.edu	USA
Puesch, Moritz	IPP Garching	mjpuesch@ipp.mpg.de	Germany
Pusztai, Istvan	Chalmers Univ. Technology	pusztai@chalmers.se	Sweden
Rafiq, Tariq	Lehigh University	rafiq@lehigh.edu	USA
Ren, Yang	PPPL	yren@pppl.gov	USA
Rice, John	MIT PSFC	rice@psfc.mit.edu	USA
Rognlien, Tom	LLNL	trognlien@llnl.gov	USA
Rost, Jon	MIT PSFC	rost@fusion.gat.com	USA
Rowan, Bill	The Univ. of Texas at Austin	w.l.rowan@mail.utexas.edu	USA
Russell, David	Lodestar Research Corporation	dave@lodestar.com	USA
Ryter, Francois	IPP-Garching	ryter@ipp.mpg.de	Germany
Schaffner, David	UCLA	dschaffner@gmail.com	USA
Schmitz, Lothar	UCLA	lschmitz@ucla.edu	USA
Sechrest, Yancey	University of Colorado Boulder	yancey.sechrest@colorado.edu	USA
Sen, Amiya	Columbia University	amiya@ee.columbia.edu	USA
Seo, Janghoon	KAIST	suhjh@kaist.ac.kr	S. Korea
Shafer, Morgan	ORNL	shafer@fusion.gat.com	USA
Shao, Che	UC Davis	sche@ucdavis.edu	USA
Smith, David	Univ. of Wisconsin Madison	drsmith@engr.wisc.edu	USA
Smith, Sterling	General Atomics	smithsp@fusion.gat.com	USA
Snyder, Phil	General Atomics	snyder@fusion.gat.com	USA
Sodarlo, Carlo		carlosodarlo@yahoo.it	
Solomon, Wayne	PPPL	wsolomon@pppl.gov	USA
Spong, Don	ORNL	spongda@ornl.gov	USA
Staebler, Gary	General Atomics	Gary.Staebler@gat.com	USA
Stotler, Daren	PPPL	dstotler@pppl.gov	USA
Sun, Hongjuan	NFRI	asufish@gmail.com	S. Korea
Tala, Tuomas	VTT Association Euratom-Tekes	Tuomas.Tala@vtt.fi	Finland
Tanaka, Kenji	NIFS	ktanaka@nifs.ac.jp	Japan
Terry, Paul	Univ. of Wisconsin Madison	pwterry@wisc.edu	USA
Thakur, Saikat	CMTFO - UCSD	saikat@ucsd.edu	USA
Tobias, Benjamin	PPPL	bjtobias@pppl.gov	USA
Tritz, Kevin	Johns Hopkins University	ktritz@pppl.gov	USA
Tynan, George	UCSD	gtynan@ucsd.edu	USA
Umansky, Maxim	LLNL	umansky1@llnl.gov	USA
Vadlamani, Srinath	Tech-X Corp.	srinath@txcorp.com	USA
Van Zeeland, Michael	General Atomics	vanzeeland@fusion.gat.com	USA
Vermare, Laure	LPP CNRS	laure.vermare@cea.fr	France
Vernay, Thibaut	EPFL-CRPP	thibaut.vernay@epfl.ch	Switzerland
Walk, John	MIT PSFC	jrwalk@psfc.mit.edu	USA
Waltz, Ron	General Atomics	waltz@fusion.gat.com	USA
Wan, Weigang	University of Colorado	Weigang.Wan@Colorado.Edu	USA
Wang, Eric	LLNL	wang53@llnl.gov	USA

Wang, Ge	University of Texas Austin	wange@physics.utexas.edu	USA
Wang, Weixing	PPPL	wwang@pppl.gov	USA
Wang, Zhixuan	UCI	zhixuanw@uci.edu	USA
Weiland, Jan	Chalmers University	elfjw@chalmers.se	Sweden
Weyssow, Boris	EFDA	boris.weyssow@efda.org	Belgium
Wilcox, Robert	Univ. of Wisconsin - Madison	rswilcox@wisc.edu	USA
Xiao, Weiwen	NFRI	xiaoww@swip.ac.cn	China
Xiao, Yong	UC Irvine	yongx@uci.edu	USA
Xu, Guosheng	Institute of Plasma Physics	gsxu@ipp.ac.cn	China
Xu, Min	UC San Diego	minxu.min@gmail.com	USA
Xu, Xueqiao	LLNL	xxu@llnl.gov	USA
Yagi, Matashoshi	RIAM Kyushu University	yagi@riam.kyushu-u.ac.jp	Japan
Yan, Zheng	Univ. of Wisconsin-Madison	yanz@fusion.gat.com	USA
Yi, Sumin	NFRI	yism@nfri.re.kr	S. Korea
Yuh, Howard	Nova Photonics	hyuh@pppl.gov	USA
Yun, Gunsu	POSTECH	gunsu@postech.ac.kr	S. Korea
Zeng, Lei	UCLA	zeng@fusion.gat.com	USA
Zhang, Huasen	UCI	zhang.huasen@gmail.com	USA
Zhang, Jie	UCLA	xyzhangj@physics.ucla.edu	USA
Zhao, Kaijun	Southwestern Institute of Phys	kjzhao@swip.ac.cn	China
Zhao, lei	UCSD	leizhao@physics.ucsd.edu	USA
Zheng, Linjin	University of Texas - Austin	lzheng@mail.utexas.edu	USA
Zhou, Shu	UC Irvine	szhou2@uci.edu	USA
Zweben, Stewart	PPPL	szweben@pppl.gov	USA