

ReNeW Theme III Workshop Agenda
March 4-6, 2009

Cross-Cutting Presentations and Thrusts (Joint with Theme 4)					
Date	Time	Topic	Presenter	Duration	
3/4/09	9:00	Technology Readiness Levels for Fusion	M. Tillack	20:00	
	9:20	Overview of the Fusion Development Facility	R. Stambaugh	20:00	
	9:40	Fusion Nuclear Science Research Thrust Using a Full Fusion Nuclear Environment	M. Peng	20:00	
	10:00	Additional Q&A, Discussion	All	20:00	
	10:20	Coffee Break		20:00	
	10:40	Plasma Facing Component Development on NHTX	R. Goldston	20:00	
	11:00	An Energy Sustainment Science Mission	D. Whyte	20:00	
	11:20	Plasma Facing Component Development Needs	D. Youchison	20:00	
	11:40	Additional Q&A, Discussion	All	20:00	
	12:00	Lunch			
	Taming The Plasma Material Interactions Theme Workshop				
	Date	Time	Topic	Presenter	Duration
	3/4/09	13:00	Theme III Introduction	M. Ulrickson	25:00
13:25		Discussion	All	05:00	
13:30		PWI Panel Introduction	J. Brooks	25:00	
13:55		Discussion	All	05:00	
14:00		PFC Panel Introduction	C. Wong	25:00	
14:25		Discussion	All	05:00	
14:30		Internal Component Introduction	R. Callis	25:00	
14:55		Coffee Break	All	30:00	
15:25		Discussion	All	05:00	
15:30		Introduction to Large Thrusts	M. Ulrickson	05:00	
15:35		Super X Divertor	M. Kotschenreut	30:00	
16:05		Discussion	All	20:00	
16:25		Taming PMI - energy Sustainment	D. Whyte	30:00	
16:55		Discussion	All	20:00	
17:15		Addressing PMI Knowledge Gaps	Baylor	30:00	
17:45		Discussion	All	20:00	
18:05	End Session		05:00		

ReNeW Theme III Workshop Agenda
March 4-6, 2009

3/5/09

Parallel sessions

PWI Panel

Time	Topic	Presenter	Duration
	Towards building a credible vision for a DEMO		
9:00	Edge Transport	LaBombard	15:00
9:15	Discussion		05:00
	Development and Validation of a Boundary		
9:20	Plasma Model	Leonard	15:00
9:35	Discussion		05:00
	Prediction of PFC plasma fluxes by improved		
9:40	edge/scrape-off-layer simulations	Rognlien	15:00
9:55	Discussion		05:00
10:00	Coffee Break		20:00
	Plasma Material Interactions (PMI)-Thrust for		
	Enhancing Modeling & Predictive		
10:20	Computations	Brooks	15:00
10:35	Discussion		05:00
	Integrated Edge-Plasma and Plasma-Wall		
10:40	Interaction Research	Stotler	15:00
10:55	Discussion		05:00
	Fundamental science of the synergy of multi-		
	species interactions in a high plasma-heat-		
11:00	flux environment	Krstic	15:00
11:15	Discussion		05:00
	Off-Normal Events in a Fusion Development		
11:20	Facility	Strait	15:00
11:35	Discussion		05:00
	Enhancing Modeling and Simulation of Plasma		
	Instabilities/Surface Interactions with		
11:40	innovative mitigation techniques	Allain	15:00
11:55	Discussion		05:00
12:00	Lunch		1:00

ReNeW Theme III Workshop Agenda
March 4–6, 2009

3/5/09	13:00	PWI issues and research opportunities	Stangeby	15:00
	13:15	Discussion		05:00
		Innovative divertor development to solve the		
	13:20	plasma heat-flux problem	Rognlien	15:00
	13:35	Discussion		05:00
		Simulating the Demo Edge Plasma in a		
	13:40	Compact High Heat Flux Experiment	Maingi	15:00
	13:55	Discussion		05:00
		The Role of a Long-Pulse, High-Heat-Flux, Hot-		
		Walls Experiment in the Study of PWI		
	14:00	Interactions for CTF and Demo	Goldston	15:00
	14:15	Discussion		05:00
	14:20	Management of dust in fusion devices	Maingi	15:00
	14:35	Discussion		05:00
	14:40	Coffee Break		20:00
	PMI Theme Joint Session			
15:00	Engineering Instrumentation	Nygren	30:00	
15:30	Discussion		20:00	
15:50	ICRF-Edge and Surface Interactions	D'Ippolito	30:00	
16:20	Discussion		20:00	
16:40	Diagnostic Investments for PMI	Stangeby	30:00	
17:10	Discussion		20:00	
17:30	Panel Leaders meeting	Closed*	30:00	
18:00	End Session			

ReNeW Theme III Workshop Agenda
 March 4-6, 2009

3/5/09

Parallel sessions

PFC Panel

Time	Topic	Presenter	Duration
9:00	Synergistic Effects of Radiation Damage and PMI	Hsu	15:00
9:15	Discussion		05:00
9:20	Advanced refractory alloys	Allain	15:00
9:35	Discussion		05:00
9:40	Carbon as a flow-through, consumable PFC material	Stangeby	15:00
9:55	Discussion		05:00
10:00	Coffee Break		20:00
10:20	BW-Surface for CTF and DEMO	Wong	15:00
10:35	Discussion		05:00
10:40	Liquid Metal Plasma –Facing Components	Majeski	15:00
10:55	Discussion		05:00
11:00	Long-Pulse, High-Heat-Flux, Hot-Walls Device for PFC	Goldston	15:00
11:15	Discussion		05:00
11:20	FDF and PFC solutions	Leonard	15:00
11:35	Discussion		05:00
11:40	FDF Divertor	Garafalo	15:00
11:55	Discussion		05:00
12:00	Lunch		1:00

ReNeW Theme III Workshop Agenda
March 4-6, 2009

Strengthened Sustained and Integrated
Approach for Modeling and Testing

3/5/09	13:00	HHFCs	Nygren	15:00
	13:15	Discussion		05:00
		The Case for Helium-Cooled Refractory		
	13:20	PFCs	Youchison	15:00
	13:35	Discussion		05:00
	13:40	PFC test facilities	Youchison	15:00
	13:55	Discussion		05:00
	14:00	An ITER-TBM Experimental Thrust	Morley	15:00
14:15	Discussion		05:00	

ReNeW Theme III Workshop Agenda
March 4-6, 2009

3/5/09

Parallel sessions

Int Comp Panel

Time	Topic	Presenter	Duration
9:00	Major measurements gaps	Peebles	15:00
9:15	Discussion		05:00
9:20	Reliable Plasma Heating and Current Drive using ICRF	Caughman	15:00
9:35	Discussion		05:00
9:40	The Problem of RF Launchers in a DEMO	Wilson	15:00
9:55	Discussion		05:00
10:00	Coffee Break		20:00
10:20	RF Launchers that Survive	Temkin	15:00
10:35	Discussion		05:00
10:40	3D Internal Coils	Menard	15:00
10:55	Discussion		05:00
11:00	RF Antennas, Launching Structures	Callis	15:00
11:15	Discussion		05:00
11:20	Panel to join other panels		

ReNeW Theme III Workshop Agenda
March 4-6, 2009

3/6/09	Discussion and Thrust Forming		
Time	Topic	Presenter	Duration
9:00	Introduction to Thrust Formation	Maingi	10:00
9:10	PWI Thrusts	All	55:00
10:05	Break	All	05:00
10:10	PFC Thrusts	All	55:00
11:05	Break	All	05:00
11:10	IC Thrusts	All	55:00
12:05	Break	All	05:00
12:10	Lunch	All	1:00
13:10	Panel working session	Closed*	20:00
13:30	IC Panel	Closed*	55:00
14:25	Break	Closed*	05:00
14:30	PFC Panel	Closed*	55:00
15:25	Break	Closed*	05:00
15:30	PWI Panel	Closed*	55:00
16:25	Break	Closed*	05:00
16:30	Wrap-up	Closed*	30:00
17:00	End Workshop		

***Closed means priority will be given to panel members when issues are discussed.
This is primarily a working session to polish the thrusts.**