ARIES Project Meeting

9/30/02

Wednesday, 2 October 2002
Princeton Plasma Physics Laboratory
Lyman Spitzer Building, Room B318

8:00		Coffee	PPPL hosts

Administrative

8:30	10 m	Welcome to PPPL + Logistical Information	Goldston
8:40	5 m	Review of Agenda	Waganer
8:45	15 m	Status of DOE Systems Studies Programs and Budgets	Opdenaker
9:00	15 m	Status of ARIES-IFE Study and Near-Term Plans	Najmabadi

Conclusions of the ARIES IFE Thick Wall Protection Scheme

Systems Analysis and Integration

9:15	15 m	Status of Heavy Ion Driver Point Design Parameters	Meier
9:30	15 m	Liquid Wall Thickness, Life, Pumping Power, and COE Tradeoffs	Meier/Abbott
9:45	15 m	**Break**	

Chamber and Final Optics Nuclear Analysis

10:00	20 m	Ferritic Steel Lifetime Assessment and Self-Consistent Nuclear Parameters for ARIES-IFE	El-Guebaly
10:20	20 m	Recycling of Target Materials Versus One-Shot Use Scenario-AI#14	El-Guebaly
10:40	30 m	Variations to/& Sensitivity of Final Focus Magnet Shielding Design - AI#7 &AI#8	Latkowski (Meier)

Liquid Chamber Analyses Results (Principally Thick Liquid Walls)

11:10	15 m	Vapor Conditions incl Ionization State in Thk Liq Walls	Haynes
11:25	30 m	Compare Aerosol Conditions of Thin and Thick Walls-AI#1	Sharpe (Raffray)
11:55	65 m	**Lunch**	
1:00	30 m	Effect of Neutron Deposition on TLW for Shock Wave Formation –AI#2	Hassanein
1:30	20 m	Oxygen Control in a FLiBe Blanket –AI#3	Sze/Billone
1:50	20 m	Discuss Structural and Nozzle Material Selection–AI#5	Billone/Sze
2:10	20 m	Coolant Cleanup and Process Requirements–AI#4	Sviatoslavsky (El-Guebaly)
2:30	30 m	Experimental Results for Thin and Thick Walls-AI#6	Yoda/Abdel-Khalik
3:00	15 m	**Break**	
3:15	20 m	FLiBe and Pb Behavior Under ID Photon Energy Deposition-AI#12	Raffray/Zaghoul
3:35	15 m	FLiBe Properties over IFE Chamber Temperature Range-AI#13	Raffray/Zaghoul

Chamber/Beam Physics, Beam Transport, and Chamber Clearing

3:50	15 m	Beamline Gas Dynamics	Debonnel
4:15	10 m	Magnetic Shutters Modeling Update	Rose
4:25	30 m	Beam Chamber Transport Requirements for Flibe Vapor Pressure and Aerosol Conditions – AI#9	Olson
4:55	15 m	LSP Modeling of Beam Aerosol Interactions	Rose/Welch

5:10 Adjourn Meeting
Dinner Arrangements: ??

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Thursday, 3 October 2002
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8:00		Coffee	PPPL Hosts
Chamber/Beam Physics, Beam Transport, and Chamber Clearing			
8:30	10 m	Status and Objectives of Pinched Mode Studies	Yu
8:40	15 m	Channel Formation for Assisted Pinch Transport	Neff
8:55	15 m	Modeling of Assisted and Self-Pinch Transport	Rose/Welch
9:10	15 m	Beam Steering Capability for Target Position Uncertainty– AI#15	Yu
Beamline Engineering			
9:25	30m	Pulsed Normal Magnets for Final Focusing –AI#16	Shuman (Derek)
9:55	**15m**	**Break**	
Target Fabrication, Injection, and Tracking			
10:10	30m	ID Target Aerosol Limits, Foam Mechanical Properties, Target Injection Accuracy, and Future ARIES Target Task –AI#10	Petzoldt
Safety Analysis			
10:40		*No safety talks scheduled*	TBD
11:15	45m	**Summarize ARIES-IFE Action Items/Plans/Next Meeting & CC Dates**	Najmabadi, et al
12:00	**60 m**	**Lunch**	
Introduction and Status of the Compact Stellarator Approach			
1:00	15 m	ARIES Plan for Assessing the Compact Stellarator	Najmabadi
Compact Stellarators as Reactors (*includes discussion time*)			
1:15	60m	Review of Existing Stellarator Reactor Studies	Lyon (Jim)
2:15	30 m	Compact Stellarators	Neilson (Hutch)
2:45	15 m	**Break**	
3:00	60 m	Physics Issues and Optimization Codes	Zarnstorff (Mike)
4:00	15m	Initial Evaluation of Computational Tools for Stability of Compact Stellarator Reactor Designs	Turnbull (Alan)
4:15	60 m	Key Engineering Issues and Constraints	Heitzenroeder (Phil)
5:15		**Adjourn Meeting**	

ARIES Project Meeting

9/30/02

Friday, 4 October 2002
Princeton Plasma Physics Laboratory
Lyman Spitzer Building, Room B318

8:00		Coffee	PPPL Hosts

Compact Stellarators as Reactors (Continued)

8:30	60m	Stellarator Reactor Optimization/Assessment Tools	Lyon (Jim)
9:30	60 m	NCSX Configuration Optimization Process	Ku (Long Po)
10:30	15m	**Break**	
10:45	30 m	Proposed Configuration Development Approach	Neilson (Hutch)

Meeting Summary

11:15	45m	**Summarize Compact Stellarator Action Items/Plans, Reminder of Next Meeting & CC Dates**	Najmabadi, et al
~ 12:00		**Adjourn**	