

Liquid Wall Chamber Dynamics
ARIES Town Meeting
May 5-6, 2003, Livermore, CA
Agenda

May 5

8:30-8:45	Welcome/logistics	W. Meier
8:45-9:10	Background and goals of the town meeting	R. Raffray
	Session 1 IFE Target Threats	
	Chair: R. Petzoldt	
9:10-9:35	Indirect-drive targets	D. Callahan
9:35-10:00	Target output	D. Haynes
10:00-10:15	Break	
	Session 2 Driver and Target Constraints	
	Chair: J. Latkowski	
10:15-10:40	Driver	S. Yu
10:40-11:05	Target materials selection and constraints on chamber conditions	R. Petzoldt
11:05-11:20	Discussion	
	Session 3 Chamber/Liquid Wall Dynamics Under Threats (short term, ~ microseconds-milliseconds) Liquid wall response to threats and early chamber dynamics	
	Chair: S. Abdel-Khalik	
11:20-11:45	BUCKY simulation of source term for aerosolization studies	D. Haynes
11:45-12:25	(1) Liquid wall ablation under IFE photon energy deposition; & (2) Flibe properties from EoS	R. Raffray/ M. Zaghloul
12:25-1:30	Lunch	
1:30-1:55	ABLATOR modeling of x-rays effects on liquid walls	S. Reyes
1:55-2:20	TSUNAMI modeling of early target and ablation debris venting	C. Debonnel
2:20-2:35	Isochoric nuclear heating and design implications	L. El-Guebaly
2:35-3:00	Numerical simulation of hydrodynamic processes in high power liquid mercury targets.	R. Samulyak
3:00-3:30	Discussion	
3:30-3:45	Break	

Chair: P. Sharpe

3:45-4:10	The effect of ionization on condensation in ablation plumes	M. Tillack
4:10-4:35	Plasma gun experiments	P. Calderoni
4:35-5:00	Shock tube experiments	R. Bonazza
5:00-5:30	Discussion	
5:30	Adjourn	

May 6

Session 4 **Chamber/Liquid Wall Dynamics** (long term, to ~0.1 s)
Session 4.1 Chamber clearing mechanisms

Chair: D. Haynes

8:00-8:25	Flibe condensation	P. Calderoni
8:25-8:50	Chamber clearing--The hydrodynamic source term	S. Abdel-Khalik
8:50-9:15	Aerosol modeling	P. Sharpe
9:15-9:40	Chamber dynamics code (2D)	Z. Dragojlovic
9:40-10:10	Discussion	
10:10-10:25	Break	

Session 4.2 Liquid re-establishment

Chair: M. Tillack

10:25-10:50	Jet disruption/recovery experiment	P. Peterson
10:50-11:15	Fluid dynamic aspects of thin liquid film Protection Concepts	S. Abdel-Khalik
11:15-11:45	Discussion	
11:45-12:30	Final discussion, wrap-up and summary	W. Meier/R.Raffray
12:30	Adjourn	