

EMMI-JINA Workshop Oct 13th & 14th - 17th, 2012
Nuclear Physics Processes in Dynamic High Energy Density Plasmas

D A R M S T A D T GSI/EMMI Saturday, October 13th, 2012

Time	Topic	Speaker	Affiliat.
8:45 AM	Welcome	Karlheinz Langanke	GSI
9:00 AM	Radiation-hydrodynamics simulations of matter at high energy density driven by laser and ion beams	Anna Tauschwitz	GSI
9:30 AM	Neutron Energy flux spec at NIF	Jac Caggiano *	LLNL
10:00AM	Gamma Ray spectroscopy at the NIF	Wolfgang Stoeffl*	LLNL
10:30 AM	Coffee Break		
11:00 AM	Nuc. Astro-Phys. Theory	Ewald Mueller *	MPI Garching
12.00 AM	Radiochemical Measurements of Neutron Capture Products at the National Ignition Facility	Dawn Shaughnessy*	LLNL

12:30 PM

Lunch Break

13:30 PM	HEDP physics	Paul Drake*	UM/LLNL
14.15 PM	PHELIX & Nuc. Physics in HEDPs	Vincent Bagnoud *	GSI
15:00 PM	Adjourn		

L O N D O N ND/JINA Sunday, October 14th, 2012

7:00 - 9:00 PM	Drinks Reception	Notre Dame London Centre
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L O N D O N ND/JINA Monday, October 15th, 2012

1st Session: Nuclear Science & Diagnostic Status at the NIF

8:45 AM	Welcome	Michael Wiescher*	ND
9:00 AM	Status of Indirect Implosion Experiments at the	Andrew McKinnon	LLNL
9:30 AM	Radiochemical measurements of neutron capture products at the National Ignition Facility	Dawn Shaughnessy*	LLNL
10:00 AM	Interpretation of Au activation data taken on the NIF	Chris Hagmann*	LLNL
11:00 AM	Ignition as a means of measuring (n,2n) cross sections & RAGS	Dawn Shaughnessy*	LLNL
10:30 AM	Coffee Break		

11:30 AM	Neutron diagnostics at NIF	Jac Caggiano *	LLNL
12:00 AM	Correlated data analysis for NIC	Charlie Cerjan*	LLNL

12:30 AM

Lunch break

2nd Session: Nuclear Plasma Physics

2:00 PM	Status of the ELI-Nuclear Physics project	Victor Zamfir	Bukarest
2:30 PM	Electron-ion collision spectroscopy at heavy ion storage rings as a new approach to study low-energy nuclear isomers	Carsten Brandau*	GSI
3:00 PM	Coffee Break		
3:30 PM	A New Window to Plasma nuclear science	Hans Hermann *	LANL
4:00 PM	Laser assisted nuclear reactions	Feodor Karpershin*	U. St.Peterburg
4:30 PM	Modeling and Simulation of nuclear processes in HEDP	Brian Appelbe*	Imp. Coll. Lond.
5:00 PM	Quantifying low-energy nuclear reaction dynamics in NIF-plasma environments	Alexis Diaz-Torres	ECT Trento
5:15 PM	Formation of dense quantum plasma systems	Ramprasad Prajapati	Guru Ghasidas U
5:30 PM	Plasma Experiments	Mohammed Elwadad	Lybia
6:00 PM	Time evolution of fermionic systems	Arnau Rios Huguet	U. Surrey, UK

Tuesday, October 16th, 2012

3rd Session: NIF diagnostics and techniques

9:00 AM	Design of a time-of-flight detector to measure the neutron spectrum at NIF	Robert Hatarik*	LLNL
9:15 AM	Neutron Activation Diagnostics at the National	Darren Bleuel*	LLNL
9:30 AM	Gamma Spectroscopy Possibilities at NIF	Wolfgang Stoeffl *	LLNL
10:00 AM	Nuclear Data Supporting the NIF Basic Research and Diagnostic Campaign	Anton Tonchev*	LLNL

10:30 AM	Coffee Break		
10:45 AM	10-year diagnostic plan for NIF	Joe Kilkenny*	LLNL
11:15 AM	Extracting Stopping Powers and the Alpha Energy Deposition at NIF	Anna Hayes*	LANL
11:45 AM	Statistical Gamma-ray	Sunniva Siem	U. Oslo

12:15 PM

Lunch break

4th Session: Nuclear Astrophysics

2:00 PM	Nuclear Science using High-Energy-Density Plasmas: A New Area of Research	Johan Frenje*	MIT
2:30 PM	Three-Particle Final State Energy Distributions: Isomeric states in nuclear astrophysics	Carl Brune	Ohio U
3:00 PM	Coffee Break		
3:30 PM	Isomeric states in nuclear astrophysics	Rene Reifarth*	U. Frankfurt
4:00 PM	Proton induced fusion reactions as a NIF temperature probes	James deBoer*	ND
4:30 PM	Charged Particle Reaction Predictions	Mary Beard*	ND
5:00 PM	AMS, a highly sensitive detection tool for minute samples	Philippe Collon	ND
5:30 PM	Neutron Capture and Plasma Experiments: Steps to understanding the s-process environment	Aaron Couture*	LANL

Wednesday, October 17th, 2012

5th Session: Atomic mediated processes

9:00 AM	Determination of Age of Various Stars Through Nuclear Reaction Rates	Kamal Chhaya*	SC Guja
9:30 AM	Atomic Configuration Effects on NEET Rate in Plasmas	Gilbert Gosselin*	CEA
10:00 AM	Nuclear-Plasma Interactions on Highly Excited States	Lee Bernstein*	LLNL/LBNL
10:30 AM	Search for NEEC process with CRYRING@ESR	Phil Walker*	U. Surrey
11:00 AM	Coffee Break		
11:30 AM	Electron induced nuclear excites states population effects on NIF Thulium radiochemistry	Rob Hoffman*	LLNL
12:00 PM	Conclusion/ Adjourn	Michael Wiescher*	ND