



Target Fabrication

Workshop

University of Greenwich, London 8th-11th May 2017

Monday 8th May

9am	09:00	Welcome registration, Tea and Coffee		
10am	10:00	Welcome announcements	David Haddock	Session 1A - Micro-target Fabrication Chair: Sallee Klein
	10:20	An Introduction to the Target Fabrication Workshop series	To Be Announced	
	10:40	Target Fabrication with two-photon polymerisation	Torsten Abel	
11am	11:00	Cu-tracer containing targets for characterisation of laser plasma experiment	Yuki Iwasa	Session 1A - Micro-target Fabrication Chair: Sallee Klein
	11:20	Short pulse target manufacture	Greg Lilleystone	
	11:40	Questions and discussions		
12pm	12:00	Lunch		
1pm	13:00	Keynote - Theoretical perspective on Target Microfabrication	Alex Robinson	Session 1B - Micro-target Fabrication Chair: Rich Seugling
	13:30	MEMS-based Target Fabrication as a Route to High Aspect Ratio and High Volume Production	Graham Arthur (Presenter: Chris Spindloe)	
	13:50	Questions and discussions		
2pm	14:10	Keynote - Target Fabrication's progress for Megajoule laser experiments	Marc Theobald	Session 2A - Facilities Chair: Mihail Cernobanu
	14:40	Research strategies within the target laboratory at ELI-NP	Cristina C. Gheorghiu	
	15:00	Target Fabrication at AWE - status, achievements and challenges	Russell Merritt	
3pm	15:20	Questions and discussions		Session 2A - Facilities Chair: Mihail Cernobanu
	15:40	Tea and Coffee		
	4pm			

Lecture Theatre – Queen Anne Court, Old Royal Naval College, Park Row, London SE10 9LS

Dinner Venue – Queen Mary Undercroft, Old Royal Naval College, Greenwich, London, SE10 9NN



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9am	09:00	Freezing Hydrogen in Nano-confinement	Sergei Kucheyev	Session 3A – Cryogenic targetry Chair: Neil Alexander
	09:20	Production of thin ribbons of solid Hydrogen for laser targets	Denis Chatain	
	09:40	Shortened turnaround time of cryogenic targets for laser-driven ion acceleration	Markus Hesse	
10am	10:00	Questions and discussions		Session 3A – Cryogenic targetry Chair: Neil Alexander
	10:20	Tea and Coffee		
	11:00	Keynote - Target Fabrication at Lawrence Livermore National Laboratory	Rich Seugling	
11:30	Target Fabrication at Rutherford Appleton Laboratory and the Target Suppliers Network	Martin Tolley		
11:50	Questions and discussions			
12pm	12:10	Lunch		
1pm	13:10	In-situ Production of Thin Cryogenic Hydrogen and Deuterium Targets for Experiments on the Vulcan Petawatt Laser Facility	Sam Astbury	Session 3B – Cryogenics Chair: Sergei Kucheyev
	13:30	Non-Contact in-situ thickness characterisation techniques suitable for cryogenics targets	Alexandra Tebartz	
	13:50	AB initio molecular dynamics of EOS in dense hydrogen: changes in structural phases and the effect of impurities	Jose Manuel Perlado Martin	
2pm	14:10	Questions and discussions		Session 3B – Cryogenics Chair: Sergei Kucheyev
	14:30	POSTER SESSION (Tea and Coffee)		
	3pm			
7pm	19:00	Dinner at the Undercroft Queen Mary Undercroft (Adjacent to the Conference venue)		

Dinner at the Undercroft
Queen Mary Undercroft (Adjacent to the Conference venue)



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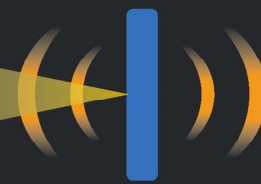
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Wednesday 10 th May			
9am	09:00	High quantity target production for LCLS Work Supported by General Atomics IR&D Funds	Neil Alexander
	09:20	Automatic target positioning system at ELI-NP	Dragos Popescu
	09:40	An automated, 0.5Hz Nano-foil target positioning system for intense laser plasma experiments	Ying Gao
10am	10:00	Questions and discussions	
	10:20	Tea and Coffee	
11am	11:00	High repetition-rate targetry for plasma mirror science	Rodrigo Lopez-Martens
	11:20	Experimental Testing of the High Accuracy Microtarget Supply (HAMS) System	Chris Spindloe
	11:40	Error modelling of a hybrid five degree of freedom mechanism for manipulation of high repetition rate laser micro-targets	Shah Karim
12pm	12:00	Questions and discussions	
	12:20	Lunch	
1pm			
13:20	13:20	Precision Laser Machining for Micro-target and Micro-Component manufacture	Lisa Harman
	13:40	Topographic characterization of micro-structured silicon targets processed in different ambient media	Tina Ebert
2pm	14:00	Free electron laser control of donor excited states in silicon	Ella Crane
	14:20	Questions and discussions	
3pm	14:40	Tea and Coffee	
	15:20		
4pm	Free Afternoon Informal Activities		

Session 4A - High repetition-rate targetry
Chair: Franco's Sylla

Session 4B - High repetition-rate targetry
Chair: Gabriel Schumann

Session 5 - Silicon Targetry
Chair: Dove Haddock



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Thursday 11 th May			
9am	09:00	Highly-replicated polymeric target shell fabrication using droplet microfluidics for inertial fusion energy	Jin Li
	09:20	Bubble target for high repetition laser with minimum mass	Keiji Nagai
	09:40	Passive channel-based fluidics for the production of Inertial Fusion Energy (IFE) shells	Nicholas Inoue
10am	10:00	Questions and discussions	
	10:20	Tea and Coffee	
11am	11:00	Current chemical capabilities in the Central Laser Facility Target Fabrication	Aasia Hughes
	11:20	Investigation of near-critical carbon foam targets for laser driven ion acceleration	Irene Prencipe
	11:40	Recent improvements in the production of low-density, porous metallic foams	Richard Taylor
12pm	12:00	Questions and discussions	
	12:20	Concluding Remarks and Workshop Finish	To Be Announced
12:40	12:40		
	1pm	Lunch	
2pm			

Session 6A - Micro-fluidic targetry
Chair: Martin Tolley

Session 6B - Micro-fluidics and Chemistry-based techniques