

## Christmas High Power Laser Science Community Meeting 14 - 16 December 2011

### Poster List

Sponsored by "Plasma Physics and Controlled Fusion" and



#### Thursday 15 December 2011: Session 1 09:00-10:30

1	James	Green	High power laser-driven Terahertz source research at the Central Laser Facility
2	Satyabrata	Kar	Radiation pressure acceleration employing Vulcan Petawatt laser
3	Margaret	Notley	Target Area West Facility Characterisation
4	Jonathan	Phillips	Two beam spatial and temporal coherent phasing with a sub picosecond laser
5	Martin	Ramsay	Characterisation of laser accelerated protons transiting planar foil targets
6	Alex	Robinson	Producing High Energy Ions with Hole-Boring RPA
7	Sam	Serra	New advances at the CLF Target Fabrication
8	Nathan	Sircombe	Modelling hot electron generation in short pulse target heating experiments
9	Marco	Galimberti	10PW Project
10	Damon	Swatton	A relativistic model of electron runaway: the role of e-e and i-e collisions in the strong field limit
11	Kristjan	Poder	Development of a single shot third order autocorrelator
12	Katalin	Mecseki	Development of an optically synchronised OPCPA laser system delivering sub 10 fs - 10 mJ pulses at 1 kHz , Transient high energy density plasmas driven by few cycle laser pulses,
13	Bernhard	Ersfeld	Harmonically Resonant Betatron Oscillations in a Laser Wakefield in Plasma
14	Jonathan	Alston	Improvements to the Astra Gemini Target Area
15	Stephen	Hughes	Integrated Modelling of Short Pulse Lasers Interactions with Simple Targets
16	Hazel	Lowe	Novel Short Pulse X-ray Backlighter Sources for the Orion Laser
17	Damien	Bigourd	Parametric amplification based Cerberus front end for contrast enhancement
18	Will	Bryan	Time-resolved multi-electron processes in recollision-free atomic tunnel ionization
19	Luca	Poletto	The ARTEMIS monochromator for extreme-ultraviolet ultrashort pulses: design and characterization
20	Daniel	Fletcher	Simple Collision Operators for Direct Vlasov Solvers
21	Matthew	Streeter	Temporal characterisation of pulse compression in laser driven wakefields. Temporal dynamics of laser-plasma interactions
22	Mohammed	Shahzad	The EUV and x-ray opacity of plasmas
23	Trevor	Winstone	Improvements and characterisation of the Petawatt Facility
24	Hugo	van der Hart	Harmonic generation in time-dependent R-matrix theory

#### Thursday 15 December 2011: Session 2 16:00-18:30

1	Hamad	Ahmed	Nonlinear propagation of relativistic and ultra short laser pulses in an under dense plasma
2	Louise	Belshaw	Femtosecond Laser Induced Ionisation and Fragmentation of Biomolecules
3	Jason	Cole	Laser Wakefield Acceleration at High Repetition Rates
4	Ozgur	Culfa	Measurement of hot electron temperature and direction in high-contrast petawatt interactions
5	Martin	Duffy	KEIRA-CHIMERA: A new method in high resolution mass spectrometry
6	Katerina	Falk	Deuterium under Extreme Conditions of Planetary Interiors
7	Javier	Fernandez Tobias	Contrast improvement in Astra Gemini Laser
8	Thomas	Fox	Non-diffusive electron transport modelling for shock ignition of ICF targets
9	George	Hicks	Simulations of near-critical density targets illuminated with Vulcan Petawatt
10	Yevgen	Kravets	Ray tracing methods applied to 3-D laser pulse propagation in time and space varying plasma media
11	David	Lloyd	Transverse Spatial Properties of High Harmonic Generation
12	David	MacLellan	Lattice structure effects on fast electron transport in laser-irradiated solids
13	Jena	Meinecke	Electron Density and Temperature Measurements of Laser-Produced Plasmas from Electron-feature Thomson-Scattering
14	Martin	Mitchell	Applications in Next Generation Accelerators
15	Merfat	Raddadi	Volkov Quantum Field Theory
16	David	Reboredo Gil	Dosimetry and X-ray calibration for radiotherapy studies
17	Graeme	Scott	A novel target geometry for multi pulse enhanced ion acceleration
18	Anna	Subiel	ALPHA-X Laser-Plasma Wakefield Accelerator
19	Svetoslav	Bajlekov	Reconstruction of Longitudinal Electron Bunch Profile by Phase Retrieval of Coherent Transition Radiation Spectra
20	Thomas	White	Electron-Ion Temperature Equilibration in Warm Dense Matter
21	Lucy	Wilson	Transmission measurements of short pulse laser heated iron foils using an x-ray laser
22	Gabriele	Mogni	Isentropic compression of condensed matter: simulation and experiment
23	Oliver	Ettlinger	Characterisation of Organic Scintillators for Detection of Laser Accelerated Ion Beams
24	Mark	Yeung	Coherent Control of High Harmonic Generation from Relativistically Oscillating Plasmas Via Elliptically Polarised Laser
25	Daniel	Kiefer	Coherent Thomson Scattering from Relativistic Electron Mirrors, Max Planck Society, Relativistic electron dynamics in laser nano-foil
26	Ross	Gray	Front surface physics in intense laser-foil interactions
27	Andrew	Simpson	Kinetic Modelling of Ablation in Inertial Confinement Fusion, Kinetic modelling of laser ablation in inertial confinement fusion
28	Siddharth	Patankar	Optical & Thomson Probing of Plasma Jets
29	Kevin	O'Keefe	Quasi-phase-matching and quantum-path selection using counter-propagating pulse trains
30	Benjamin	Mossbarger	Ultrafast Laser Irradiation of Nickel Nanowire Targets
31	Thomas	Kierspel	Attosecond Beamline Development at Artemis Facility
32	Lewis	Liu	Method for Quasi-Phase Matching of High Harmonic Sources
33	Andrew	Simpson	Kinetic Modelling of Ablation in Inertial Confinement Fusion
34	Haydn	Powell	X-ray measurements of laser-plasma interactions, X-ray probing measurements of laser-plasma interactions, Ultraintense laser-driven ion acceleration
35	Chris	Price	Development of an Optical Levitation Trap for Precise Spatial Control of Microdroplet Targets in Vacuum
36	Wolf	Rittershofer	Laser Plasma Acceleration in tapering plasma channels
37	Tom	Goffrey	An r-z Arbitrary Lagrangian Eulerian Code for MHD Problems
38	Marija	Skramic	1-D particle-in-cell simulations of electron-beam driven wakefields in plasma
38	Daniel	Johnson	Techniques In Determining Half-life From Spectra