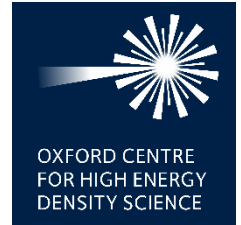




# OxCHEDS Seminars Archive

(Updated 12 February 2025)



#	Speaker	Title	Date	Location
2025				
2024				
62	Prof Ben Thornber <i>Queen's University Belfast</i>	Shock-driven compressible turbulent mixing in planar and convergence geometries	23 July 2024 11:30	Audrey Wood Seminar Room
61	Dr Ellie Tubman <i>Imperial College London</i>	Creating magnetised, collisionless shocks using a laser-driven platform	04 March 2024 11:30	Simpkins Lee Lecture Theatre
60	Dr Adrian Crilly <i>Imperial College London</i>	Radiation modelling for HEDP and ICF experiments	05 February 2024 11:30	Simpkins Lee Lecture Theatre
59	Dr Chris Murphy <i>University of York</i>	Improving and imaging laser-based radiation sources	29 January 2024 11:30	Simpkins Lee Lecture Theatre
2023				
58	Dr Charlotte Palmer <i>Queen's University Belfast</i>	Exploiting novel liquid sheet targets for the generation of high-flux radiation sources	20 November 2023 11:30	Simpkins Lee Lecture Theatre
57	Prof Rajeev Pattahil <i>STFC</i>	Plasma acceleration in EPC	13 November 2023 11:30	Simpkins Lee Lecture Theatre
56	Dr Art Pak <i>LLNL</i>	Target gain > 1 from inertial confinement fusion implosions at the National Ignition Facility	17 October 2023 15:00	Simpkins Lee Lecture Theatre
55	Prof Chrystèle Sanloup <i>UPMC, Université Sorbonne</i>	Planetary interiors: a wealth of pressure-induced phenomena	09 October 2023 11:30	Simpkins Lee Lecture Theatre
54	Dr Alexis Casner <i>CEA-CESTA</i>	Unravelling novel hydrodynamics instabilities in HED plasmas on NIF	30 January 2023 11:30	Online seminar
2022				
53	Dr Tammy Ma <i>LLNL</i>	Accelerating the rate of discovery: Toward high-repetition laser-driven High Energy Density (HED) Science	14 November 2022 16:45	Online seminar
52	Robert Paddock <i>University of Oxford</i>	Foams for inertial confinement fusion: Modelling and experiments	10 October 2022 11:30	Simpkins Lee Lecture Theatre
51	Dr Tammy Ma <i>LLNL</i>	Accelerating the rate of discovery: toward high-repetition-rate laser-driven high energy density (HED) science	13 June 2022 11:30	Simpkins Lee Lecture Theatre
50	Prof Carolyn Kuranz <i>University of Michigan</i>	Creating astrophysical conditions in the laboratory	16 May 2022 11:30	Simpkins Lee Lecture Theatre
49	Prof Dustin Froula <i>LLE</i>	Measuring electron distribution functions with Thomson scattering	21 February 2022 11:30	Simpkins Lee Lecture Theatre

48	Prof Farhat Beg <i>UC San Diego</i>	Laser-acceleration of energetic protons and fast ignition inertial confinement fusion	31 January 2022 16:00	Online seminar
47	Dr Sam Azadi <i>University of Oxford</i>	Quasiparticle effective mass of the three-dimensional fermi liquid	17 January 2022 11:30	Simpkins Lee Lecture Theatre

## 2021

46	Dr Adrien Descamps <i>SLAC</i>	Direct measurements of bulk temperature using inelastic x-ray scattering at x-ray free electron lasers	6 December 2021 10:00	Audrey Wood Seminar Room
45	Dr Muhammad Kasim <i>University of Oxford</i>	Integrating machine learning and quantum chemistry with fully differentiable quantum chemistry	18 October 2021 11:30	Simpkins Lee Lecture Theatre
44	Dr Spencer Jolly <i>ULB</i>	Spatio-temporal characterization: reaching the limits of understanding ultrashort laser pulses	11 October 2021 11:30	Simpkins Lee Lecture Theatre
43	Dr Hui Chen <i>LLNL</i>	Advances in relativistic electron-positron pair production using high power lasers	7 June 2021 11:30	Online seminar
42	Dr Ramy Aboushelbaya <i>University of Oxford</i>	Orbital angular momentum in high-power laser interactions	31 May 2021 11:30	Online seminar
41	Dr Félicie Albert <i>LLNL</i>	Laser plasma accelerators: next-generation x-ray light sources	17 May 2021 16:00	Online seminar
40	Dr Luke Ceurvorst <i>CELIA</i>	Understanding and mitigating the ablative Rayleigh-Taylor instability in inertial confinement fusion	10 May 2021 11:30	Online seminar
39	Dr Jens Osterhoff <i>DESY</i>	Plasma accelerators for applications in health, photon science, and particle physics	1 March 2021 11:30	Online seminar
38	Dr Marija Vranic <i>Instituto Superior Técnico</i>	Radiation-dominated electron acceleration in plasma channels using extremely intense light	15 February 2021 11:30	Online seminar
37	Dr Jessica Shaw <i>University of Rochester</i>	New developments in laser wakefield acceleration at the laboratory for laser energetics	25 January 2021 11:30	Online seminar

## 2020

36	Dr Sebastien Le Pape <i>LULI</i>	High power lasers: from fusion energy to the death of stars	30 November 2020 11:30	Online seminar
35	Prof Petros Tzeferacos <i>University of Rochester</i>	Concerted simulations and laser-driven laboratory experiments to shed light on fundamental physical processes in plasma astrophysics	23 November 2020 11:30	Online seminar
34	Prof Michael Bonitz <i>Kiel</i>	Perspectives of quantum plasma and warm dense matter theory	26 October 2020 11:30	Online seminar
33	Dr James Sadler <i>LANL</i>	Improved transport coefficients for collisional magnetized plasma	19 October 2020 15:00	Online seminar
32	Dr Muhammad Kasim <i>University of Oxford</i>	Up to two billion times acceleration of scientific simulations with deep neural architecture search	8 June 2020 11:00	Online seminar
31	Dr Nitin Shukla <i>Instituto Superior Técnico</i>	Exploring magnetic field generation in unmagnetized plasmas under realistic laboratory conditions	11 May 2020 11:00	Online seminar
30	Dr Emma McBride <i>SLAC</i>	Towards the centre of the Earth and beyond: combining hard x-ray FELs with dynamic compression	11 February 2020 11:30	Simpkins Lee Lecture Theatre
29	Dr Sam Vinko <i>University of Oxford</i>	Mapping the electronic structure of warm dense nickel via resonant inelastic x-ray scattering	6 February 2020 11:30	Simpkins Lee Lecture Theatre

28	Dr Dominik Kraus <i>TU Dresden</i>	Warm dense matter: from giant planets and stars to nanoparticles	3 February 2020 11:30	Simpkins Lee Lecture Theatre
27	Dr Francisco Suzuki-Vidal <i>Imperial College London</i>	Astrophysical jets in the context of high energy density science	30 January 2020 11:30	Simpkins Lee Lecture Theatre
26	Dr Gemma J Anderson <i>LLNL</i>	Calibrated uncertainties in predictive models of inertial confinement fusion using large-scale learning	21 January 2020 11:00	Simpkins Lee Lecture Theatre

## 2019

25	Prof Marta Fajardo <i>Instituto Superior Técnico</i>	Ultrafast imaging of warm dense plasmas: shedding light into rapidly changing opaque plasmas	6 November 2019 11:00	501 Denys Wilkinson Building
24	Prof Byuong Ick Cho <i>Gwangju Institute of Science and Technology</i>	Ultrafast processes in HED matter created by femtosecond lasers	5 September 2019 11:00	Audrey Wood Seminar Room
23	Dr Rob Rudd <i>LLNL</i>	High strain rate plasticity following phase transformations	12 July 2019 11:00	Audrey Wood Seminar Room
22	Dr Kirk A Flippo <i>LANL</i>	High energy density hydrodynamics and ICF experiments at Los Alamos National Laboratory	5 July 2019 11:00	Audrey Wood Seminar Room
21	Dr Peter Hatfield <i>University of Oxford</i>	Machine learning and algorithmic approaches for ICF and other HEDP experiments	11 February 2019 11:30	Audrey Wood Seminar Room
20	Prof John Allen <i>University of Oxford</i>	The Bennett pinch for non-relativistic electrons	4 February 2019 11:30	Audrey Wood Seminar Room
19	Dr Agapi Emmanouilidou <i>UCL</i>	Interactions of atoms and molecules with free electron lasers	28 January 2019 11:30	Audrey Wood Seminar Room
18	Dr Alexis Casner <i>University of Bordeaux</i>	Turbulent-like Rayleigh-Taylor instability experiments in high energy density plasmas	14 January 2019 11:30	Audrey Wood Seminar Room

## 2018

17	Prof Farhat Beg <i>UCSD</i>	Review of fast ignition: the Good, the Bad, and the Ugly	28 November 2018 16:00	Simpkins Lee Seminar Room
16	Prof Heidi Reinholz <i>University of Rostock</i>	Quantum statistical approach to transport and optical properties in warm dense matter	8 October 2018 11:30	Audrey Wood Seminar Room
15	Dr Laura Chen <i>University of Oxford</i>	Laboratory observation of stochastic particle diffusion in a turbulent plasma	29 January 2018 11:30	Audrey Wood Seminar Room

## 2017

14	Dr John Foster <i>AWE</i>	In-situ x-ray diffraction investigations of shock- and ramp-compressed copper and vanadium	30 October 2017 11:30	Audrey Wood Seminar Room
13	Dr Matt Hill <i>AWE</i>	Petawatt laser driven ion beams as a tool for equation of state studies	18 October 2017 11:30	Audrey Wood Seminar Room
12	Prof Patrick Audebert <i>LULI</i>	Current status of the LULI laser facilities and Cilex project	6 June 2017 10:30	Audrey Wood Seminar Room
11	Dr Hye-Sook Park <i>LLNL</i>	Frontiers in high energy density physics at the National Ignition Facility and other high power laser facilities	28 April 2017 14:00	Audrey Wood Seminar Room
10	Dr Joseph Aouad <i>LULI</i>	X-ray free electron lasers interaction with matter: collisional-radiative modelling	24 April 2017 14:00	Audrey Wood Seminar Room

---

## 2016

---

9	Dr Rob Rudd <i>LLNL</i>	Multiscale modelling of high-rate plasticity in bcc metals	15 July 2016 11:30	Audrey Wood Seminar Room
---	----------------------------	--	-----------------------	-----------------------------

---

## 2015

---

8	Dr Markus Roth <i>Technical University of Darmstadt</i>	Intense ion and neutron beams from high contrast short pulse lasers	5 March 2015 14:00	Robert Hooke Room
7	Dr Pedro Velarde and Dr Alberto de la Varga <i>IFN and UPM</i>	Time-dependent non-equilibrium atomic and electronic response modelization in high intensity x-ray laser-matter interaction	24 February 2015 12:00	Audrey Wood Seminar Room

---

## 2014

---

6	Dr Jon Eggert <i>LLNL</i>	Extreme-compression high-energy-density physics (EC HEDP) experiments	28 June 2014 15:00	Audrey Wood Seminar Room
5	Dr Bruce Hammel <i>LLNL</i>	Simulating and diagnosing shell pR perturbations and hot-spot mix in NIF capsule implosions	1 August 2014 11:30	Audrey Wood Seminar Room
4	Prof Chris Pickard <i>UCL</i>	<i>Ab initio</i> random structure searching	19 May 2014 14:00	Audrey Wood Seminar Room

---

## 2013

---

3	Dr John Foster <i>AWE</i>	Astrophysically-relevant hydrodynamics experiments using lasers	2 July 2013 14:00	Audrey Wood Seminar Room
2	Prof Robin Marjoribanks <i>University of Toronto</i>		18 October 2013 14:00	501 Denys Wilkinson Building
1	Prof Eduardo Branga <i>Universidad Nacional de Cuyo</i>	Shock induced plasticity and phase transitions in bcc metals	9 October 2013 14:00	Audrey Wood Seminar Room

---

---