

## **Scientific Program**

### **31/08/2025 (Sunday)**

19:00-21:30            Welcome Buffet

### **01/09/2025 (Monday)**

0900 – 0930            Summary talk – Radiation Transport, *Stuart Sim*  
0930 – 0950            Progress Report 1 – *New synthetic observables from range of dynamical ejecta models, Christine Collins*  
0950 – 1010            Progress Report 2 – *Light-travel time effects / Reverberation in KNe, Fiona McNeill*  
1010 – 1030            Progress Report 3 – *Impact of improved atomic models for heavy elements on spectral modelling, Andreas Floers*  
  
1130 – 1150            Progress Report 4 – *Strontium and Helium in NLTE, Aayush Arya*  
1150 – 1200            Flash Talk 1 – *Update on ARTIS models / comments on implications for what is needed from hydro models, Luke Shingles*  
1200 – 1210            Flash Talk 2 – *Efficient light curve fitting with Artis, Rasmus Damgaard*  
~~1210 – 1220            Flash Talk 3 – *Metal/Al progress, Rasmus/Moust*~~  
1220 – 1230            Q/A?  
1400 – 1500            WS-1a. :- *Atomic Theory & Radiation Transport*  
                              WS-1b. :- *Observation & Experiment*  
  
1600 – 1700            WS-2a. :- *Radiation Transport & Merger Simulation*  
                              WS-2b. :- *Observation & Atomic Theory*  
  
1700 – 1730            Summary WS-1a,1b, 2a, 2b.

### **02/09/2025 (Tuesday)**

0900 – 0930            Summary talk – Merger Simulations, *Andreas Bauswein*  
0930 – 0950            Progress Report 1 – *Progress on hydro modelling, Oliver Just*  
0950 – 1010            Progress Report 2 – *Patterns and conditions of r-process nucleosynthesis, Zewei Xiong*  
1010 – 1030            Progress Report 3 – *Emission line shapes expected from hydro models, Stuart Sim*

1130 – 1140	Flash Talk 1 – Grey M1 <i>neutrino transport in AREPO</i> , Aristeidis Nikolaidis
1140 – 1150	Flash Talk 2 – General Relativistic Hydrodynamics in AENUS-ALCAR, Chun-Ming Yip
1150 – 1200	Flash Talk 3 – <i>Remnant Lifetime Predictions from the Post-Merger Gravitational Wave Signal</i> , Marcel Humbert
1200 – 1210	Flash Talk 4 – <i>Molecules, Gamma spectra, Th /U isomeric</i> , Gabriel Martinez-Pinedo
1210 – 1220	Flash Talk 5 – <i>Hyperons</i> , Andreas Bauswein (or as progress re)
1220 – 1230	
1400 – 1500	WS-1a. :- <i>Atomic Theory &amp; Merger Simulation</i> WS-1b. :- <i>Radiation Transport &amp; Experiment</i>
1600 – 1700	WS-2a. :- <i>Merger Simulation &amp; Experiment</i> WS-2b. :- <i>Radiation Transport &amp; Observation</i>
1700 – 1730	Summary WS-1a,1b, 2a, 2b.

### **03/09/2025 (Wednesday)**

0900 – 0930	Summary talk – <i>Atomic Calculations</i> , Cathy Ramsbottom
0930 – 0950	Progress Report 1 – <i>New atomic data and collisional radiative modelling for Se III and Ce III</i> , Leo Mulholland
0950 – 1010	Progress Report 2 – <i>An update on radiative and dielectric recombination rates</i> , Connor Ballance
1010 – 1030	Progress Report 3 - <i>Photoionisation cross section of Sr and Pb across multiple charge states</i> , David Dougan

1130 – 1140	Flash Talk 1 – <i>A speed up using a distorted wave with resonances methodology</i> , Leo Mulholland
1140 – 1150	Flash Talk 2 – <i>Structure models for Nd</i> - Michael McCann
1150 – 1200	Flash Talk 3 – <i>Electron-impact ionisation of Carbon using DRMPS</i> - David Dougan
1200 – 1210	Flash Talk 4 – <i>Effect of electron excitation on lanthanides emission spectra</i> - Andreas Floers
1210 – 1220	Flash Talk 5 – <i>Future code developments</i> - Connor Ballance
1220 – 1230	Flash Talk 6 – <i>Potential Fano resonances in gold laser produced plasmas</i> , David Mckeagney

### **04/09/2025 (Thursday)**

0900 – 0930	Summary talk – Observation , <i>Darach Watson</i>
0930 – 0950	Progress Report 1 – <i>The overseen lines on AT2017gfo</i> , <i>Albert Sneppen</i>
0950 – 1000	Flash Talk 1 – <i>a new kilonovae?</i> , <i>Danielle bjørn</i>
1000 – 1030	Summary talk – Experiments, <i>Padraig Dunne</i>
1130 – 1150	Progress Report 1 – <i>Identifying Atomic Data: what is the ‘best’ approach?</i> , <i>Lynda Hutchison</i>
1150 – 1200	Flash Talk 1 – <i>Updates on Dual-Comb Spectroscopy &amp; Measurement of Oscillator Strengths</i> , <i>Hope Dannar</i>
1200 – 1210	Flash Talk 2 – <i>An update on the identification and spectroscopic analysis of Zr and Y</i> , <i>Kirsten Dowd</i>
1210 – 1220	Flash Talk 3 – <i>Update on MIR experiments</i> , <i>Lucero Segura Juarez</i>
1220 – 1230	Flash Talk 4 – <i>Searching for a continuum source for achieving absorption spectroscopy</i> , <i>Marym Alenazi</i>
1400 – 1500	WS-1a.:– <i>Atomic Theory &amp; Experiment</i> WS-1b.:– <i>Merger Simulation &amp; Observation</i>
1600 – 1700	WS-2:– All nodes
1700 – 1730	Summary WS-1a,1b, 2a, 2b.

### **05/09/2025 (Friday)**

0900 – 1030	WS1:– All nodes
1130 – 1230	WS2:– All nodes