Below we provide a preliminary program for

HEAVYMETAL IV: Neutron star mergers and the origin of the r-process

Theme-titles for individual sessions is indicative of topics discussed, but not exhaustive for the diversity in each session. Talks are scheduled to be 20 minutes each, with time for questions and discussion after.

Monday - 5th of May: 9: Darach Watson 'Welcome, opening remarks and overview'

9-12: Stellar spectroscopy & GCE: (Kasper Elm Heintz as Chair)

- Freeke van de Voort	'r-process enrichment in cosmological simulations'
- Camilla Hansen	'New observations of heavy elements in old metal
	poor stars
CDD accepted KN	

GRD-associated KIN	
- Andrew Levan	'Kilonovae in gamma-ray bursts
- Om Sharan Salafia	'Gamma-ray bursts from compact binary mergers'

14:30 - 17 - KN spectral features: (Aayush Arya as Chair)

- Morgan Fraser	'Finding Kilonovae is Hard'
- Nanae Domoto	'Signatures of heavy elements in kilonova photospheric spectra'
- James Gillanders	'Detectability of r-process Signatures in James Webb Kilonova Spectra'
Coffee-break - Albert Sneppen - Daniele Malesani	'Observational limits on helium abundance in AT2017gfo' 'A JWST survey of gamma-ray bursts supernova progenitors'

- Daniele Malesani	'A JWST survey of gamma-ray bursts supernova progenitors'

Tuesday - 6th of May:

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9-12 – RT	(Rasmus Damgaard as Chair)
- Anders Jerkstrand	'Spectral synthesis modelling of kilonovae, and opportunities with JWST'
- Luke Shingles	'Radiative Transfer for NSMs with realistic masses'
- Blanka Vlaagos	'Spectral modelling of kilonovae in 3D NLTE'
- Fiona McNeill	'Using new atomic data in kilonova modelling'
- Andreas Floers	'Calibrated Forbidden Lanthanide Emission Lines'

14:00 - 23:00

Afternoon excursion & conference dinner

Wednesday - 7th of May:	
9-12 - Atomic Data	(Cathy Ramsbottom as Chair)
- Leo Mulholland	'Atomic Data for Kilonovae'
- Rasmus Damgaard - Michael McCann	'Machine Learning in atomic data synthesis' 'TBD'

- Steven Bromley	'Metastable-resolved Ionization and Recombination Properties
	of Te I - III'
- Stephan Fritzsche	'Atomic cascade computations for astro and plasma physics'

14:30 - 17:00: Experminental/Stellar Hydro (Emma Sokell as Chair)

- Kirsten Dowd 'Near Infra-red Absorption Spectroscopy for Zirconium and Yttrium'
- Hope Dannar 'Dual-Comb Spectroscopy of Heavy Metals'
- Eoin Fagan 'Visible and NIR Spectra of Hafnium'

- Thomas Janka	'Outflows from White Dwarfs Collapsing to Neutron Stars'
- Ruediger Pakmor	'Double white dwarf mergers revisited'

Thursday - 8th of May:

Morning program (9-12): Experimental Section (Leo Mulholland as Chair)

- John Costello	'One Colour Multiphoton Ionization and Two Colour Photoionization Control at Free Electron Lasers - Neon and Acetylene'
- Elizabeth Den Hartog	'Experimental Transition Probabilities for Singly Ionized Lanthanides'
- Marym Alenazi +	
Lucero Segura Juarez	'Lutetium Spectra and Colliding Plasma Setup'/ 'An Overview of UV and MIR Photo-absorption'
- David McKeagney + Eanna Donohoe	'4f Photo-absorption of Gold Ions '/ 'Towards Direct Measurements of Oscillator Strengths from LRP's'
- Aayush Arya:	'A path to the Spectra of Actinides and superheavy Elements'

14:30-17:00: Neutrinos and nucleosynthesis (Oliver Just as chair)

- Irene Tamborra	'Neutrinos in and from r-process sources'
- Zewei Xiong	'neutrino oscillations or nucleosynthesis'
- Yong Zhong Qian	'r-process nucleosynthesis and multimessenger astrophysics'
- Stephane Goriely	'progress in the modelling of nuclear inputs for r-process nucleosynthesis'
- Samuel Giuliani	'Nuclear masses and r-process nucleosynthesis'

Friday - 9th of May:

9-12: Merger hydro (Yong as chair)

- Oliver Just 'Neutron-star merger modelling'

- Tobias Fischer 'Equation of state for hot and dense matter in astrophysical
- simulations'
- Georgios Lioutas 'TBD'
- Taimur Hafeez + Chandan Bagdia 'Data procurement and management'

11:30 Concluding remarks by Stuart Sim