

MPhys Placements and Projects Conference 2024

Monday 22nd – Tuesday 23rd January 2024, 8W 3.13 & 3.14

MONDAY 22nd

Monday 22 nd	8W 3.13 (Venue A)	8W 3.14 (Venue B)
	Session Chair: Prof. Simon Bending	Session Chair: Dr Gary Mathlin
9:15 – 9:45	Charles Perek-Jennings – <i>Measuring modes in hollow core fibres</i> [Supervisors: KRR & KH, Assessors: JCK, PAS]	Emily Smith – <i>Bath Physics Observatory: A blinking ladder to the stars</i> [Supervisor: VS & PXS, Assessors: CV, GM]
9:45 – 10:15	Oscar Leonard – <i>Investigating the Scale Dependence of Planar Metamaterials for Magnetic Field Concentration</i> [Supervisor: SJB & ASN, Assessors: PXS, KRR]	Wendy Wallace – <i>Disentangling afterglows and kilonovae</i> [Placement: Nordita, Assessors: HJVE, GM]
10:15 – 10:45	Jude Ramsbottom – <i>Fabrication and Characterisation of CVD MoS₂ Field Effect Transistors</i> [Supervisor: SD & SJB, Assessors: KT, KA]	Remi Shakespeare-Smith – <i>Connecting Over-reflection of Waves to Vortex Dynamics in Astrophysical Discs</i> [Supervisor: DT, Assessors: HJVE, GM]
<i>Break</i>		
	Session Chair: Dr Pete Mosley	Session Chair: Dr Kei Takashina
11:15 – 11:45	Daniel Goodwin – <i>title</i> [Supervisors: KRR & KH, Assessors: JCK, PAS]	Jack Tweddle – <i>Gamma-ray burst afterglow emission up to very high energies</i> [Supervisor: HJVE, Assessors: DT, PS]
11:45 – 12:15	Taran Clayton – <i>Sonic metamaterials: guiding, slowing down and “storing” sound</i> [Supervisors: ASN & AG, Assessors: DW, JCK]	
12:15 – 12:45	Mattia Fornasiero – <i>Modelling mesoscopic physics in superconducting nanostructures</i> [Supervisor: SC & SJB, Assessors: MMK, ASN]	Usama Bin Irfan – <i>Modelling late-time spectra of supernovae</i> [Placement: Uni. of Stockholm, Assessors: PS, CV]
<i>Break</i>		
	Session Chair: Dr Kei Takashina	Session Chair: Dr Patricia Schady
13:45 – 14:15	Luke Tolson – <i>Novel Manufacturing Techniques of Clathrate Hydrates for the HighNESS Project</i> [Placement: ILL, Assessors: EDC, PSS]	Aurora Capobianco – <i>Supernova interactions with the interstellar medium</i> [Placement: Nordita, Assessors: CV, SRD]
14:15 – 14:45	Benjamin Andrews – <i>Model Free Prediction of Neuronal Oscillations</i> [Supervisor: ARN, Assessors: RJ, SC]	Daniel Hitchen – <i>Gamma-ray burst afterglow emission up to very high energies</i> [Supervisor: HJVE, Assessors: DT, PS]
14:45 – 15:15	Cian Vine-Nealon – <i>Understanding charge carrier cooling in metal-halide perovskites for next generation solar cells using Machine Learning</i> [Supervisor: ABW, Assessors: RJ, HR]	Christopher Hilton – <i>Moving-mesh simulations of stellar explosions followed by a pulsar wind</i> [Supervisor: HJVE, Assessors: PS, DT]
<i>Break</i>		
	Session Chair: Dr Kei Takashina	Session Chair: Dr Alessandro Narduzzo
15:45 – 16:15	Dafydd Heyburn – <i>Model Free Prediction of Neuronal Oscillations</i> [Supervisor: ARN, Assessors: RJ, SC]	Kieran Wylie – <i>Artificial Intelligence and natural environments across the oceans</i> [Supervisor: PB, Assessors: ASN, EDC]
16:15 – 16:45	Phoebe Millard – <i>Tokamak Science - modelling and simulations</i> Placement: CCFE, Assessors: SC, HR]	Alexander Boreham – <i>The sounds of climate change in the Arctic</i> [Supervisor: PB, Assessors: PAS, AZ]
16:45 – 17:15		Jack Small – <i>Artificial Intelligence and natural environments across the oceans</i> [Supervisor: PB, Assessors: ASN, EDC]
<i>End of day</i>		

TUESDAY 23rd

Tuesday 23rd	8W 3.13 (Venue A)	8W 3.14 (Venue B)
	Session Chair: Dr Kei Takashina	Session Chair: Dr Gary Mathlin
9:15 – 9:45	Oliver Morris – <i>Investigating the Scale Dependence of Planar Metamaterials for Magnetic Field Concentration</i> [Supervisor: SJB & ASN, Assessors: PXS, KRR]	Fin Taylor – <i>AGN feedback in low-mass galaxies</i> [Placement: University of Heidelberg, Assessors: SRD, GM]
9:45 – 10:15	Charlotte Marr – <i>Rediscover a lost route to the stars: 6R-TaSe2</i> [Supervisor: EDC & SC, Assessors: DW, KRR]	Zara Martins – <i>Bath Physics Observatory: A blinking ladder to the stars</i> [Supervisor: VS & PXS, Assessors: CV, GM]
10:15 – 10:45		James Kilsby – <i>Fuzzy black hole masses: how far can we push black hole mass measurement in heavily obscured sources?</i> [Supervisor: CV, Assessors: SRD, VS]
<i>Break</i>		
	Session Chair: Dr Peter Sloan	
11:15 – 11:45		
11:45 – 12:15	Hannah Martin – <i>Rediscover a lost route to the stars: 6R-TaSe2</i> [Supervisor: EDC & SC, Assessors: DW, KRR]	
12:15 – 12:45	Armaan Flisher – <i>title</i> [Supervisor: PB. Assessors: PAS, KRR]	
<i>Break</i>		
	Session Chair: Dr Kei Takashina	
13:45 – 14:15	Ewen Jones – <i>Computational studies of novel two-dimensional nanomaterials</i> [Supervisor: DW, Assessors: MMK, HR]	
14:15 – 14:45	Zachary Thornton – <i>Fabrication and Characterisation of CVD MoS2 Field Effect Transistors</i> [Supervisor: SD & SJB, Assessors: KT, KA]	
14:45 – 15:15	Amy O'Connor – <i>Dynamics of Leidenfrost Droplets on a Flat Surface</i> [Supervisor: KT, Assessors: PSS, KA]	
<i>Break</i>		

FRIDAY 26th

Friday 26th		8W 3.14 (Venue B)
		Session Chair: Dr Kei Takashina
10:15 – 10:45		Samuel Franklin – <i>Moving-mesh simulations of stellar explosions followed by a pulsar wind</i> [Supervisor: HJVE, Assessors: PS, DT]
<i>End of conference</i>		