

# UKI Discs Meeting

Day 1 – Monday 8th September

**10:15–10:45 Welcome Tea & Coffee**

**10:45–12:30 Introduction & Review Talks – Chair: Tim Pearce**

**10:45–11:00** — Introduction (Welcome, Code of Conduct, Logistics) — Phil Lucas (Herts)

**11:00–11:30** — *Review Talk: Protoplanetary Discs* — John Ilee (Leeds)

**11:30–12:00** — *Review Talk: Debris Discs* — Minjae Kim (MSSL, UCL)

**12:00–12:30** — *Review Talk: White Dwarf Discs* — Amy Bonsor (Cambridge)

**12:30–14:00 Lunch**

**14:00–15:00 Disc Structure and Evolution 1 – Chair: Anibal Sierrak**

**14:00–14:15** — Insights into early stages of disk evolution — Fabiola Antonietta Gerosa (UCL)

**14:15–14:30** — The fate of the 2nd circumbinary disc — post-AGB binaries — Anna Penzlin (LMU Munich)

**14:30–14:45** — Debris-disc masses: first constraints from narrow discs — Tim Pearce (Warwick)

**14:45–15:00** — The Secret Lives of Disks: the earliest stages — Maria Jose Maureira (MPE)

**15:00–15:30 Tea Break**

**15:30–16:30 Disc Structure and Evolution 2 – Chair: Maria Koutoulaki**

**15:30–15:45** — (Sub)mm Analysis of HD 32297's Edge-on Debris Disk — Patricia Luppe (Trinity)

**15:45–16:00** — The ODISEA Project: Planet Formation in  $\rho$  Ophiuchi — Camilo González-Ruilova (USantiago)

**16:00–16:15** — Asymmetric debris disks: how do eccentric rings glow? — Joshua Lovell (CfA Harvard-Smithsonian)

**16:15–16:30** — Non-Thermal Radio Variability in YSOs: A VLBA Census of the ONC — Eoin O'Kelly (Herts)

**16:30–17:00 Poster Pop-ups – Chair: Mike Kuhn**

**17:00–18:30 Poster Session & Drinks**

**09:15–10:30 Disc Structure and Evolution 3 – Chair: Till Käufer**

- 09:15–09:30** — The transition from protoplanetary to debris discs — Benjamin Homewood (Exeter)  
**09:30–09:45** — VLT/IRIS reveals the inner disc of a massive protostar — Maria Koutoulaki (Leeds)  
**09:45–10:00** — Planetesimals in debris discs and dust grain sizes — Jonathan Marshall (ASIAA)  
**10:00–10:15** — Spiral Arms in a Nearly Broken Protoplanetary Disc — Sahl Rowther (Leicester)  
**10:15–10:30** — Planets and Substructure Feedbacks on Disk Thermal Structure — Kan Chen (UCL)

**10:30–11:00 Coffee Break**

**11:00–11:45 Irradiated Discs – Chair: Belinda Damian**

- 11:00–11:15** — Externally irradiated planet-forming disks — Thomas Haworth (QMUL)  
**11:15–11:30** — The Lifetimes and Evolution of Discs in Starburst Environments — Matt Cusack (Cardiff)  
**11:30–11:45** — Role of Cluster Environment on Protoplanetary Disks — Saumya Gupta (QMUL)

**11:45–12:00 Disc Processes 1 – Chair: Belinda Damian**

- 11:45–12:00** — High angular resolution evidence of dust traps from deep ALMA Band 3 observations of LkCa15 — Anibal Sierra (UCL)

**12:00–13:30 Lunch**

**13:30–15:00 Disc Processes 2 – Chair: Richard Booth**

- 13:30–13:45** — Planet migration in Turbulent Disc — Yinhao Wu (Leicester)  
**13:45–14:00** — Gone with Wind: CO depletion in MHD-wind driven discs — Zuzanna Jonczyk (Leeds)  
**14:00–14:15** — MRI and vertical oscillations in distorted disks — Loren Held (DAMTP Cambridge)  
**14:15–14:30** — Dust dynamics in the inner regions of protoplanetary disks — Thomas Jannaud (DAMTP Cambridge)  
**14:30–14:45** — Gas Heating & Cooling in Debris Discs: Insights from  $\beta$  Pic — Sana Ahmed (Trinity)  
**14:45–15:00** — A mechanism to form radially compact protoplanetary discs — Simin Tong (Leicester)

**15:00–15:30 Tea Break**

**15:30–16:45 Time Domain Studies of Discs 1 – Chair: Andrew Swan**

- 15:30–15:45** — WD Debris Disks: Variability Incompatible with Canonical Model — Hiba Tu Noor (UCL)  
**15:45–16:00** — Characterising a WD with transiting debris in the habitable zone — Akshay Robert (UCL)  
**16:00–16:15** — Temporal variation of warps & shadows in protoplanetary discs — Katie Milsom (Exeter)  
**16:15–16:30** — Eruptive Variables in Nearby Star-Forming Regions with VVV — Hariharan Muthu (Herts)  
**16:30–16:45** — Unveiling the variability of massive YSOs with the VVV/X survey — Gabriella Zsidi (Herts)

**16:45–17:00 Conference Photo**

**17:00–17:30 Time Domain Studies of Discs 2 – Chair: Andrew Swan**

- 17:00–17:15** — The Missing YSO Outbursts: Mid-IR Selected Eruptive YSOs — Calum Morris (Valparaíso)  
**17:15–17:30** —  $\rho$  Ophiuchi and the hidden mass reservoir — Isaac Radley (Leeds)

**17:30–18:00 Discussion**

**09:15–10:30 Disc Composition – Chair: Patricia Luppe**

**09:15–09:30** — Dust compositions in white dwarf disks — Andrew Swan (Warwick)

**09:30–09:45** — Inside the water snowline: connecting disk evolution to JWST spectra — Till Käufer (Exeter)

**09:45–10:00** — Pebble Drift and Volatile Entrapment: Impact on Planet Formation Chemistry — Joe Williams (Exeter)

**10:00–10:15** — Chemical co-evolution of dust and gas in protoplanetary discs — Tamara Molyarova (Leeds)

**10:15–10:30** — Chemical Compositions of Disk-instability planets — George Blaylock-Squibbs (UCLan)

**10:30–10:45 Formation of Planets & Brown Dwarfs 1 – Chair: Patricia Luppe**

**10:30–10:45** — V960 Mon b: a dust-embedded substellar object formed by GI? — Anuroop Dasgupta (ESO)

**10:45–11:15 Coffee Break**

**11:15–12:30 Formation of Planets & Brown Dwarfs 2 & EDI session – Chair: Thomas Jannaud**

**11:15–11:30** — Planet formation by disc fragmentation: the impact of dust growth on opacity — Hans Lee (Leicester)

**11:30–11:45** — Planet formation sculpted by infall: the importance of multi-scale turbulence — Andrew Winter (QMUL)

**11:45–12:15** — Equity and Inclusivity Practices in Academia — Amena Faruqi (Warwick)

**12:15–12:30** — Sandwiched planet formation: restricting the mass of a middle planet — Farzana Meru (Warwick)

**12:30–14:00 Lunch**

**14:00–14:45 Formation of Planets & Brown Dwarfs 3 – Chair: Jay Farihi**

**14:00–14:15** — Towards a population synthesis study of increasingly realistic protoplanetary discs — Adam Koval (Edinburgh)

**14:15–14:30** — Testing planet formation via GI: FU Ori outbursts and Free-Floating Planets — Sergei Nayakshin (Leicester)

**14:30–14:45** — Planet formation in spontaneous dust traps in magnetized disks — Timmy Delage (Imperial)

**14:45–15:45 Exoplanet discs & planetesimal signatures – Chair: Jay Farihi**

**14:45–15:00** — Exocomets Overview — Daniela Iglesias (Leeds)

**15:00–15:15** — The search for Exorings and a Short Period Circumsecondary Disk Candidate — Niamh Mallaghan (QUB)

**15:15–15:30** — Discs around planetary-mass objects: new insights from JWST — Belinda Damian (St Andrews)

**15:30–15:45** — When Worlds Collide: Imaging post-impact debris in HD172555 — Zoe Roumeliotis (Trinity)

**15:45 Closing remarks**