

UKI Discs Meeting

Day 1 – Monday 8th September

10:15–10:45 Welcome Tea & Coffee

10:45–12:30 Introduction & Review Talks — Chair: Phil Lucas

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

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 — ρ Ophiuchi and the hidden mass reservoir — Isaac Radley (Leeds)

14:45–15:00 — Debris-disc masses: first constraints from narrow discs — Tim Pearce (Warwick)

15:00–15:30 Tea Break

15:30–16:30 Disc Structure and Evolution 2

15:30–15:45 — The Secret Lives of Disks: the earliest stages — Maria Jose Maureira (MPE)

15:45–16:00 — (Sub)mm Analysis of HD 32297's Edge-on Debris Disk — Patricia Luppe (Trinity)

16:00–16:15 — The ODISEA Project: Planet Formation in ρ Ophiuchi — Camilo González-Ruilova (USantiago)

16:15–16:30 — Asymmetric debris disks: how do eccentric rings glow? — Joshua Lovell (CfA Harvard-Smithsonian)

16:30–17:00 Poster Pop-ups

17:00–18:30 Poster Session & Drinks

09:15–10:30 Disc Structure and Evolution 3

- 09:15–09:30** — The transition from protoplanetary to debris discs — Benjamin Homewood (Exeter)
09:30–09:45 — VLTI 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

- 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

- 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

- 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 β 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

- 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

- 17:00–17:15** — Non-Thermal Radio Variability in YSOs: A VLBA Census of the ONC — Eoin O’Kelly (Herts)
17:15–17:30 — The Missing YSO Outbursts: Mid-IR Selected Eruptive YSOs — Calum Morris (Valparaíso)

17:30–18:00 Discussion

09:15–10:30 Disc Composition

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 Kaefer (Exeter)

09:45–10:00 — ARKS: Resolved $^{12}\text{CO}/^{13}\text{CO}$ Ratios in Debris Discs — Sorch Mac Manamon (Trinity)

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

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

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

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

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