

Binary stars: Current developments and preparing for future missions

Schedule

Talks

Tuesday 09h00-10h30

09h00: High precision stellar astrophysics with eclipsing binary stars (Invited) (Pierre Maxted)

09h20: Inflation or inference? Revisiting the M dwarf radius inflation problem with eclipsing binaries (Yasmin Davis)

09h32: The radial velocity discovery of BEBOP-5b, a circumbinary planet orbiting a binary containing an evolved primary. (Aleya Adamson)

09h44: From single to double-lined: absolute, dynamical masses using HRCCS (Adam Stevenson)

09h56: Stellar merger remnants: Varied morphologies and complex chemistry (Thomas Steinmetz)

10h08: Magnetic white dwarfs as probes of the double-degenerate merger channel (Aayush Desai)

10h20 POSTER POP

Tuesday 14h15-15h45

14h15: (Invited) Title TBC (Max Briel)

14h35: Yields of the “holy grail” neutron deficient isotopes of molybdenum and ruthenium in neutron star common envelopes (Sophie Abrahams)

14h47: Challenges to the Classical Treatment of Massive Binary Interactions from Observed Stripped Stars in Binaries (Dandan Wei)

15h59: A match made in heaven: Gaia and APOGEE for binary stellar characterisation (Rhys Seeburger)

15h11: Revising analytic equations of stellar evolution to include massive stars and alpha-enhancement: Implications for binary population synthesis (Conor Byrne)

15h23: The impact of binary stars on the chemical evolution of galaxies (Rob Yates)

15h35 POSTER POP

Posters

- Mapping the Mass Discrepancy in Eclipsing Binaries (Ema Šipková)
- Exploring the circumbinary desert with Gaia, TESS, and PLATO (Frédéric Marcadon)
- Eclipsing Binaries from the Next Generation Transit Survey (Toby Rodel)
- Characterisation of EBLM benchmark stars and their M-dwarf companions (Axel Hahlin)
- The impact of modelling approaches and data precision on massive pulsating eclipsing binaries (Logan Dennis)
- About the stability of circumbinary planets: binary properties and migration scenarios (Romain Grane)
- Exploring the Uncertainties in Binary Stellar Population Synthesis modelling (Elizabeth Stanway)
- Testing tidal theory with the period-eccentricity distribution (Alexander Boone)
- Better understanding EBLMs with longer orbital periods. (Samuel Carlier)
- Modelling X-ray Binary Populations with BPASS (John Bray)
- The surprising binary populations of massive star clusters (Sebastian Kamann)
- Predictions of the detectability and confirmability of self-lensing binaries in future surveys (Adam McMaster)