Stars and Planets in Hobart 2026: program v3

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00		*Chair: Taïssa Danilovich*	*Chair: Mark Wardle*	*Chair: Simon Murphy*	*Chair: Babatunde Akinsanmi*
9:15		**Kateryna Andrych (review)** *Across wavelengths and spatial scales: multiwavelength studies of second-generation protoplanetary discs*	**Rajika Kuruwita (review)** *Attempting the find the origin of FUor outbursts starting from ISM scales*	**May Gade Pedersen (review)** *Multicolour photometry of pulsating early-type stars from TESS, Gaia, and Roman*	**Jean-Philippe beaulieu (review)** *NASA Roman : mass function of cold planets down to the mass of Ganymede, and Free-Floating planets*
9:30		**Maksym Mohorian** ALMA's sharpest view of IRAS 08544-4431: Unveiling the dust distribution asymmetries in the post-AGB circumbinary disc	**Bradley Johnson** The interstellar lifecycle: Using dense gas to study pre-stellar clusters in the Milky Way	**Sabine Bolwell** Red giant asteroseismology of Kepler background stars	**Tom Evans-Soma** Can we determine if most sub-Neptunes are water worlds or gas dwarfs?
9:45		**Peter Scicluna** Pre-supernova dust production in the mid-infrared	**Arunima Arunima** A kinematic age for PDS 70 and the resulting constraints on planet formation	**Lorenzo Martinelli** Prospects for constraining angular momentum transport in solar-like main-sequence stars with PLATO	**Michael Elston** Automatic Detection of Exocomets in the β Pictoris system
10:00		**Toon De Prins** Gravitas axem torquet: Time-series VLTI constraints on the dynamic dusty disc rim around a highly evolved binary	**Jonah Goldfine** Machine-learned Protoplanetary Disk Representations for JWST Interferometric Imaging	**Dorsa Majidi** Fourier Analysis of Gravity-Mode Period Spacing Patterns as an Age Diagnostic	**Owen Downes** Probing The Longitudinal Structure of KELT-25b Through Atmospheric Ionisation
10:15		**Ben Montet** Solar System Science with TESS	**Catherine Smith** Long Term Variability of Dipper Stars	**Tom Love** Why do some stars achieve runaway pulsation amplitudes?	**Morning tea**
10:30		**Morning tea**	**Morning tea**	**Morning tea**	
10:45	**10:50 Welcome**				*Chair: Angharad Weeks*
11:00	*Chair: Andrew Cole*	*Chair: Maksym Mohorian*	*Chair: Maja Jablonska*	*Chair: Erica Thygesen*	**Rebecca Nealon (review)** *Finding misaligned planets*
11:15	**Sven Buder (review)** *Precision stellar spectroscopy: extracting more from every spectrum*	**Taïssa Danilovich (review)** *Lifting the veil on evolved stars with observational astrochemistry*	**Alexander Wallace (review)** *From Astrometric Wobbles to True Masses: Preparing for Gaia DR4*	**Adam Rains (review)** *K/M Dwarfs and the Pathway to Unlocking Their Chemistry for Galactic Archaeology and Exoplanet Demographics*	**Ali Pourmand** Second-Generation Planets or Ablated Stars? Formation Scenarios for Pulsar Planets
11:30	**Ethan Bull** Improved Chemical Abundances for AAOmega Spectra through Machine Learning	**Riley Thai** Mass transfer stability on the TP-AGB	**Thavisha Dharmawardena** Beyond Parallax: Variable-Star Distances with Gaia DR4	**Chelsea Huang** Planet demographics with TESS	**Alexander Heger** How asteroids collide
11:45	**Anell Cornejo-Cárdenas** Bridging observations and simulations through chemical abundance patterns in dwarf galaxies	**Kayla Martin** The Light Common Envelope ("CE-Lite"): Tackling the Post-Giant Binary Puzzle	**Siska-Lut Buelens** Timing General Relativity: Searching for Apsidal Precession in HD 80606 b	**Zachariah Jones** Exoplanet Detection Pipeline for Signals with Large Transit Timing Variations	**Babatunde Akinsanmi** A view of the Ultra-hot Jupiter WASP-103b from its JWST/NIRSPec- Prism phasecurve
12:00	**Simon Correra** Distinguishing Different Galactic Accretion Events using GALAH DR4 Chemical Abundances	**Harshit Pal** Stellar Fingerprints: What isotopic ratios reveal about post-AGB stars	**Erica Thygesen** The Nyx Catalogue: Paving the way for Roman with extinction mapping of the Galactic Bulge	**Alice Ellerton** The Eccentricity Distribution of TESS Multi-Planet Systems	**Ylenia Mascolo** Atmospheric and evolutionary characterisation of K2-18 b
12:15	**Nimantha Samaratunge Mudiyanselage** Mass and metallicity thresholds for the stability of monolithic supermassive stars	**Claudia Fava** Tracing the Chemistry of Evolved Stars from the Photosphere to the Circumstellar Environment	**Angharad Weeks** First Detection of Stellar Granulation and Oscillations from JWST Exoplanet Light Curves	**Thomas Plunkett** The TASSIE Program II: Three Close-In Companions Orbiting Sun-Like Stars	**Lunch**
12:30	**Lunch**	**Lunch**	**Lunch and steering committee meeting**	**Lunch**	
12:45					
13:00					
13:15					
13:30					*Chair: Sven Buder*
13:45	*Chair: Adam Rains*	*Chair: Rajika Kuruwita*	*Chair: Chelsea Huang*	*Chair: Rebecca Nealon*	**Alex Parsons-Nield** Simulating Stargrazing Exocomets in the Beta Pictoris System
14:00	**Laura Driessen** Stellar science with the Sydney Radio Star Catalogue	**Jade Powell** Core-collapse supernova simulations with different masses, rotation rates and equations of state.	**Benjamin Pope** The Lazuli Space Observatory: Stellar and Exoplanet Science	**Andrew Cole** OGLE-2015-BLG-1395Lb: Cold Sub-Saturn Around and M Dwarf Discovered from Tasmania	**Karen Pollard** Studies of young star star systems which host exocomets
14:15	**Daniel Zucker** From Little Things Big Things Grow: Deciphering the Milky Way's Accretion History with S5 and OzArch	**Gang Li** PLATO-TIDES: Probing binary tidal interactions in the PLATO era	**Tiasha Biswas** Exoplanets in Radio - using Statistics	**Belinda Nicholson** Project SWIFT: Exoplanet science through partnerships with space industry	**Daniel Price** Conference summary: stars and planets in Australia and where we go from here
14:30	**Clare Worley** Investigating the chemical enrichment history of the solar neighbourhood	**Ryosuke Hirai** Changing the mindset for rapid stellar evolution modelling	**Evgeni Grishin** Hot Jupiter formation by Galactic perturbations to old wide binary stars	**Qichen Huang** Polarised radio emission from two newly found T9 dwarfs	
14:45	**Adithya Gudalur Balasubramaniam** The S5 Survey's View of NGC 1851's Stellar Stream	**Matthew Pinson** Tracing the history of blue stragglers	**Alex Andersson** A volume-limited radio survey of southern active M dwarfs	**Hayley Wagner** Understanding Inner Super Earths and Cold Jupiters Relationship With TESS and AAPS	
15:00	**Ankita Mondal** Tracing cosmic helium abundances using K-dwarfs	**Muskaan Monteiro** Modelling Carbon Deficient Giants: Stellar Binaries Produce Peculiar Evolved Stars	**Mia Babatsikos** Chemical signatures of planet engulfment in solar twins	**Hayden Greer** A Data-Driven Model of HST/NICMOS for High-Resolution and High-Contrast Imaging	
15:15	**Diego Ulloa-Solis** Self-consistent temperatures and luminosities for giant stars in globular clusters.	**Ethan Hallam** The Dance of Spinning Stars	**Gabriel McMahon-Killingsworth** Can life exist in triple star systems?	**Milo Langker** Spectral Information Content of Diffraction-Limited Images	
15:30	**LJ Spriggs** Sketching an Evolving Map of the Milky Way	**David Pontin** Dynamics of thermally-driven stellar winds generated in the stellar atmosphere	**Excursion (followed by conference dinner in the evening)**	**Priyashkumar Mistry** Towards Precision Radial Velocities with Veloce	
15:45	**Afternoon tea**	**Afternoon tea**		**Afternoon tea**	
16:00	*Chair: Alexander Heger*	*Chair: Thavisha Dharmawardena*		*Chair: Amanda Karakas*	
16:15	**Holger Baumgardt** The Origin of Multiple Stellar Populations in Globular Clusters	**Simon Murphy** Beyond isochrones: accurate stellar properties and realistic uncertainties for early type stars from stellar population synthesis.		**Joel Ong** Weighing the Cores of Red Giants and Black-hole Stars using Momentum Conservation	
16:30	**Michael Albrow** oMEGACat BH-2: Black-hole binary or microlensing event?	**Dennis Stello** Estimating fundamental stellar properties on a grand scale		**Oliver White** Spacecraft phase scintillation as a probe of solar wind activity	
16:45	**Heather Sinclair-Wentworth** Comparing the anti-correlations in NGC4372 and NGC6218	**Rachael Errington** Raiders of the Lost Isotopes: Hunting for the Chemical Secrets of W Aquilae		**Liam Russell** Understanding the Main Sequence Evolution of Intermediate Mass Stars through the Pleiades	
17:00	**Mitchell Hooymans** Understanding Black Hole Formation Using Dense Star Clusters	**Conaire Deagan** Mapping stellar surfaces via simulation-based inference using photometric and astrometric signals		**Saakshi Wadhwa** Confidently wrong: when short TESS baselines fail to resolve pulsation modes	
17:15	**Margo Thornton** A Black Hole Hiding in a Binary: A Dark Tertiary Companion to a Nearby Eclipsing Binary	**Muhammad Fajrin** A Pulsation Analysis of the Young δ Scuti Star HD 172555 using TESS Photometry and Échelle Spectroscopy		**Abhinav Govindan Iyer** Linking Changes in Magnetic Energy to Internal and External Sources	
17:30					
17:45					
18:00					