



Thesis Prize Winners

The Michael Penston and Keith Runcorn (formerly the Blackwell) Thesis Prizes are awarded for the best doctoral thesis in astronomy or geophysics respectively.

Year	Michael Penston Thesis Prize (Astronomy)	Keith Runcorn Thesis Prize (Geophysics)
2021	<p>Winner: Maria Vincenzi (Portsmouth) with a thesis entitled: Core-collapse contamination in photometric samples of Type Ia Supernovae</p> <p>Runner-up: Riccardo Bucicchio (Birmingham) with a thesis entitled: Topics in Bayesian population inference for gravitational wave astronomy</p> <p>Runner-up: Matthew Price (UCL) with a thesis entitled: Bayesian Variational Regularisation for Dark Matter Reconstruction with Uncertainty Quantification</p>	<p>Winner: Dr Juan Alday Parejo (Oxford)- Unravelling the isotopic imprints of Martian CO₂ and H₂O using solar occultation observations from the Atmospheric Chemistry Suite onboard ExoMars Trace Gas orbitor</p> <p>Runner-up: Dr Nicolina Chrysaphi (Glasgow) - Fine structures of solar radio bursts: origins and radio-wave propagation effects</p>
2020	<p>Winner: Dr Jennifer Yik Ham Chan (UCL) 'All-sky Radiative Transfer and Characterisation for Cosmic Structures'</p> <p>Runner-up: Dr Luisa Lucie-Smith (UCL) 'Insights into cosmological structure formation with machine learning'.</p>	<p>Winner: Dr Thomas Kettlety - Microseismic and geomechanical investigation of injection-induced fault reactivation</p>
2019	<p>Winner: Dr Luke Pratley (UCL) 'Radio Astronomy Image Reconstruction in the Big Data Era'</p> <p>Runners up: Dr Cleo Loi (Cambridge) 'Magnetic Fields and Stellar Oscillations' and Dr Oliver Tattersall (Oxford) 'Testing Gravity with Black Holes'</p>	<p>Winner: Dr Muhammad Atif Nawaz (Edinburgh) 'Efficient Probabilistic Inversion of Geophysical Data'</p> <p>Runner up: Dr Hayley Allison (Cambridge) 'Understanding how low energy electrons control the variability of the Earth's electron radiation belts'</p>

2018	<p>Winner: Dr Alexandra Amon (Edinburgh) 'Cosmology with the Kilo-Degree Lensing Survey.'</p> <p>Runner up: Dr Antonella Palmase (UCL) 'Unveiling the unseen with the Dark Energy Survey: gravitational waves and dark matter'</p>	<p>Winner: Dr Ophelia Crawford (Cambridge) 'On the Viscoelastic Deformation of the Earth'.</p> <p>Runner up: Dr Fred Richards (Cambridge) 'Global Analysis of Predicted and Observed Dynamic Topography'</p>
2017	<p>Winner: Dr Sownak Bose (Durham) BEYOND LCDM: Exploring alternatives to the standard cosmological paradigm</p> <p>Runner up: Dr Ivan Cabrera-Ziri (LJMU) Constraining the Origin of Multiple Stellar Populations within Stellar Clusters</p>	<p>Winner: Dr Jenny Jenkins (Cambridge) The seismic signature of the Iceland mantle plume from crust to mid-mantle wind.</p> <p>Runners up: Dr Rohini Giles (Oxford) Jupiter's tropospheric composition and cloud structure from 5-μm spectroscopy. Dr Nadine Kalmoni (UCL) - The role of magnetospheric plasma instabilities in auroral and substorm dynamics</p>
2016	<p>Winner: Dr Justin Alsing (Imperial) Bayesian analysis of weak lensing</p> <p>Runners up: Dr Antonia Bevan (UCL) Dust- Affected Models of Characteristic Line Emission in Supernovae</p>	<p>Winner: Dr Rishy Mistry (Imperial) Magnetic reconnection exhausts in the solar wind.</p> <p>Runner up: Dr Robert Green (Cambridge) The structure and seismicity of Icelandic rifts</p>
2015	<p>Winner: Dr Matt Nicholl (Queen's University Belfast) Observations and modelling of super- luminous supernovae</p> <p>Runner up: Dr Alexandre Barreira (Durham University) Structure formation in modified gravity cosmologies</p>	<p>Winner: Dr Matteo Ravasi (University of Edinburgh) Reciprocity-based imaging using multiply scattered waves</p> <p>Runner up: Dr Callum Shakespeare (University of Cambridge) On the generation of waves during frontogenesis</p>
2014	<p>Winner: Dr Guido Pettinari (University of Sussex) The intrinsic bispectrum of the Cosmic Microwave Background</p> <p>Runners up: Dr David Harvey (University of Edinburgh) Measuring the self-interaction cross-section of dark matter with astronomical particle colliders", and Dr Boris Leistedt (University College London) "Accurate Cosmology with Galaxy and Quasar Surveys"</p>	<p>Winner: Dr Hannah Christensen (née Arnold) (University of Oxford) Stochastic Parametrisation and Model Uncertainty</p> <p>Runner up: Dr Grace Nield (Newcastle University) The Effect of Late Holocene Ice-Mass Changes on Glacial Isostatic Adjustment in West Antarctica</p>
2013	<p>Winner: Dr Joseph Elliston (University of Sussex) Observable predictions of generalised inflationary scenarios</p> <p>Runner up: Dr Emma Chapman (University College London) The Epoch of Reionization (EoR)</p>	<p>Winner: Dr Richard Walters (University of Leeds) Geodetic observation and modelling of continental deformation in Iran and Turkey</p> <p>Runner up: Dr Alex Chartier (University of Bath) Ionospheric Specification and Forecasting</p>

2012	<p>Winner: Dr Adam Ingram (University of Durham) A physical model for the variability properties of X-ray binaries</p> <p>Runner up: Dr Stephen Feeney (University College London) Novel Algorithms for Early Universe Cosmology</p>	<p>Winner: Dr Sudipta Sarkar (University of Southampton) Glacial stratigraphy, gas-escape features and ocean fine-structures from multichannel high-resolution reflection seismic data offshore West Svalbard</p> <p>Runner up: Dr Nicholas Johnson (University of Edinburgh) Magnetotelluric studies of the crust and upper mantle in a zone of active continental breakup, Afar, Ethiopia</p>
2011	<p>Winner: Dr Ryan Cooke (University of Cambridge) Finding the First Metals</p> <p>Runners up: Dr Adrian Barker (University of Cambridge) Tidal Interactions between Planets and Stars and Dr David Sobral (University of Edinburgh) The Star- Formation History of the Universe</p>	<p>Winner: Dr David Kipping (University College London) The Transits of Extrasolar Planets with Moons</p> <p>Runner up: Dr David Andrews (University of Leicester) Planetary-Period Oscillations in Saturn's Magnetosphere</p>
2010	<p>Winner: Dr Duncan Forgan (University of Edinburgh) Probing Self-Gravitating Discs Using Smoothed Particle Hydrodynamics with Radiative Transfer</p> <p>Runner up: Dr Andrew Eyre (University of Oxford) On the Dynamics of Tidal Streams in the Milky Way Galaxy</p>	<p>Winner: Dr James Verdon (University of Bristol) Microseismic monitoring and geomechanical modelling of CO₂ storage in subsurface reservoirs</p> <p>Runner up: Dr Richard Morton (University of Sheffield) Magneto-seismology: The influence of the properties of solar waveguides on MHD wave propagation</p>
2009	<p>Winner: Dr Baojiu Li (University of Cambridge) Physical and Cosmological Implications of Modified Gravity Theories</p> <p>Runner up: Dr Emily Curtis (University of Cambridge) A Submillimetre Survey of Clustered Low-Mass Star Formation</p>	<p>Winner: Dr David Halliday (University of Edinburgh) Surface Wave Interferometry</p> <p>Runner up: Dr Lasse B. N. Clausen (University of Leicester) Ultra-low frequency waves in the magnetosphere</p>
2008	<p>Winner: Dr Kevin Schawinski (University of Oxford) The Star Formation History of Early-type Galaxies</p> <p>Runner up: Dr Rita Tojeiro (University of Edinburgh) Analysing observables in structure formation theories</p>	<p>Winner: Dr David Jess (Queen's University Belfast) High-cadence observations of the solar atmosphere</p> <p>Runner up: Dr Remco de Kok (University of Oxford) Oxygen compounds, aerosols and condensate clouds in Titan's stratosphere</p>
2007	<p>Winner: Dr Joern Geisbuesch (University of Cambridge) Cosmology with Sunyaev- Zel'dovich Cluster Surveys</p> <p>Runner up: Dr Joseph Zuntz (Imperial College London) Cosmic Microwave Background Power Spectrum Estimation and Prediction with Curious Methods and Theories</p>	<p>Winner: Dr Leigh Fletcher (University of Oxford) Saturn's Atmosphere: Structure and Composition from Cassini/CIRS</p> <p>Runner up: Dr Dirk-Jan van Manen (University of Edinburgh) Time-reversal and Interferometry with applications to forward modeling of wave propagation and a chapter on receiver functions</p>

2006	<p>Winner: Dr Kate Land (Imperial College, London) Exploring anomalies in the Cosmic Microwave Background</p> <p>Runners up: Dr James Bolton (University of Cambridge) Exploring the ionisation state of the intergalactic medium with Lyman-alpha absorption and Dr Adam Moss (University of Manchester)</p>	<p>Winner: Dr Sophie Bassett (University of Durham) Modelling sea-level observations to investigate the source and magnitude of major meltwater pulses during termination 1</p> <p>Runner up: Dr James While (University of Leeds)</p>
2005	<p>Winner: Dr Haley Gomez (nee Morgan) (Cardiff University) The Origin and Evolution of Dust</p> <p>Runners up: Dr Jeanne Wilson (University of Oxford) A Measurement of the 8B Solar Neutrino Energy Spectrum at the Sudbury Neutrino Observatory and Dr Carrie Trundle</p>	<p>Winner: Dr Phillip Livermore (University of Leeds) Magnetic stability analysis for the geodynamo</p> <p>Runner up: Dr Trudi Hoogenboom (University of Leeds) Gravity and Topography Signatures of Venusian Coronae</p>
2004	<p>Winner: Dr Clive Dickinson (University of Manchester) Diffuse Galactic Radiation and its Application To CMB Observations</p>	<p>Winner: Dr Paul Williams (University of Oxford)</p> <p>Runner up: Dr James Wookey Modelling and interpreting seismograms for 3D Earth structure: A study of mid-mantle anisotropy</p>
2003	<p>Winner: Dr Samuel Leach (University of Sussex) Precision inflationary perturbations and cosmic microwave background anisotropies</p> <p>Runners up: Dr Chris Blake (University of Oxford) Large-scale structure via wide-area radio surveys and Dr Darren Madgwick (University of Cambridge) 2dF Galaxy Redshift Survey: Galaxy Spectra and Cosmology</p>	<p>Winner: Dr Clare Watt (British Antarctic Survey) Wave-particle interactions and anomalous resistivity in collisionless space plasmas</p>
2002	<p>Winner: Dr Mark Wright (University of Bristol) Probing the star-forming region W3(OH) with ground-state hydroxyl masers</p> <p>Runners up: Dr Loretta Dunne (Cardiff University) The First Statistical Survey of the Submillimetre Properties of Local Galaxies and Dr Ole Moeller (University of Cambridge) Numerical Methods for Gravitational Lensing</p>	<p>Winner: Dr Emma Bunce (University of Leicester) Large-scale current systems in the jovian magnetosphere</p> <p>Runners up: Dr Kathryn Hardacre (University of Edinburgh) Controls on Fault Network Evolution and Population Statistics – Insights from Field Studies and Numerical Modelling and Dr Claire Newman (University of Oxford) Modelling the dust cycle in the Martian atmosphere</p>
2000	<p>Winner: Dr Andrew Benson (University of Durham) Galaxy formation and clustering in a hierarchical universe</p> <p>Runners up: Dr Sara Ellison (University of Cambridge) and Dr Rob Hynes (University of Sussex)</p>	<p>Winner: Dr Dave Skeet (University of Oxford) Equatorial and midlatitude circulation of Jupiter's atmosphere</p> <p>Runners up: Dr Mimi Hill (University of Liverpool) The Microwave Paleointensity Technique and its Application to Lava and Dr Dan Raymer (University of Leeds) The</p>

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