

James Dungey Lecture – Dr Karen Aplin

Full citation

Dr Karen Aplin has established and developed the new science area of Planetary Atmospheric Electricity, by bringing together the previously independent terrestrial and planetary atmospheric electricity communities. Her defining review paper, *Atmospheric Electrification in the Solar System*, published in 2006, led to her being a co-convenor of a related meeting at the International Space Science Institute in Bern and subsequently a co-editor of the extensive, diverse meeting publication, “*Planetary Atmospheric Electricity*”, consistently in the top 25% of Springer downloads.

Dr Aplin is an Associate Professor in Space Science and Technology in the Faculty of Engineering at the University of Bristol, known for her work on ionisation in planetary atmospheres. Her comparative planetary approach has brought new understanding to brightness variations observed on Neptune, identifying ion-induced droplet nucleation from cosmic rays, published in *Nature Communications*. Having coordinated activity around future in-situ exploration of the Ice Giants, she is a formal collaborator for the ice giants’ mission Atmospheric Structure Instrument team.

Her influence and wide interests are shown by her journal editorial roles and committee positions at special interest groups within the Royal Meteorological Society and Institute of Physics. As an accomplished lecturer and educator, she has given numerous international invited plenary lectures and public lectures, including many media interviews and was the principal contributor to a BBC Radio 3 programme.

For these reasons, Dr Aplin is awarded the James Dungey Lectureship (G) 2021.

Short citation

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