



Royal
Astronomical
Society

The 2024 Winton Award (G) is awarded to Dr Andy W. Smith

Dr Andy W. Smith is awarded the Winton Award for his significant contributions to our understanding of magnetic reconnection at both Saturn and Mercury and to the quantification and prediction of Space Weather effects at Earth.

Dr Smith exhibits significant breadth and depth in his scientific investigations, with expertise in data analysis, algorithm development, computer simulation, and machine learning.

He has published prolifically, exhibiting significant leadership in designing new scientific investigations and demonstrating his rich seam of new ideas.

In addition to making important contributions to the science of magnetic reconnection in different planetary magnetospheres, and substorm research in the terrestrial magnetosphere, Dr Smith's work has contributed to our current state-of-the-art capabilities in space weather.

His model on ground induced currents is now used by the UK Met Office and he is already one of the world leaders in the application of artificial intelligence techniques for the understanding and prediction of space physics.

In the eyes of his collaborators "he makes the genuinely difficult appear routine, and there is no analysis that is too complex for him to perform to get to the final goal of understanding the physics behind a given posed question".

Dr Smith has contributed significantly to public engagement and outreach, including through the University of Southampton Planeterra project, and through the UCL ORBYTS initiative, engaging with school students from disadvantaged backgrounds.

For these reasons Dr Andy Smith is awarded the Winton Award.