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The 2023 Winton Award (G) is awarded to Dr Ravindra Desai

Dr Ravindra Desai has made substantial and outstanding contributions to science in the field of space plasma physics, with a specialism in computational plasma modelling. He graduated with a PhD from the Mullard Space Science Laboratory, University College London, in 2018. He was recently awarded an STFC Ernest Rutherford Fellowship which he took up in October 2022 at the University of Warwick.

Dr Desai has developed a new capability for modelling high-energy radiation belt plasma in a realistic and rapidly time-varying terrestrial magnetosphere. This model is uniquely capable of capturing the rapid non-diffusive dynamics associated with the most severe space weather events, in addition to providing important insight into the physics of solar-terrestrial plasma interactions. Dr. Desai has also developed novel heliospheric modelling capabilities. Dr Desai's work is an inspiring example of how to harness next-generation high-performance computing capabilities to solve space physics problems.

Dr Desai is an outstanding mentor and supervisor of students, even at his early career stage. He has guided multiple student projects through to publication, providing the necessary scientific leadership and encouragement. He has been an active committee member of the "Imperial as One" Race Equality Advisory Group. These activities demonstrate his promising development into a science leader who supports all to succeed and seeks to actively change the profession for the better.

For these reasons, Dr Ravindra Desai is awarded the Winton Award for Geophysics.