

Dr Michele Bannister: 2020 Winton Award

Dr Michele Bannister is a prominent and very active figure in the exploration of the outer Solar System. Since receiving her Ph.D. from the Australian National University in December 2014, Dr Bannister has worked as a Postdoctoral Research Fellow at the University of Victoria and the National Research Council of Canada, and most recently at the Queen's University of Belfast.

Dr Bannister's major work is in the surveying and discovery of the distant and observationally challenging trans-Neptunian Objects (TNOs), and in characterising their orbital populations and physical properties. Dr Bannister played a central role in the design and management of the Outer Solar System Origins Survey (OSSOS) — which used the Canada-France-Hawaii Telescope to discover and map the orbits of more than eight hundred TNOs over five years. The OSSOS survey has provided a uniquely valuable high-quality sample of TNOs, and a quantitative framework within which to evaluate models for the early dynamical sculpting of the outer Solar System.

Dr Bannister is also involved in the European Space Agency's first F-class mission, Comet Interceptor, in the development of concepts for a future giant planet and Kuiper belt flyby mission, and in planning the Large Synoptic Survey Telescope's upcoming decade of Solar System surveying.

Aside from her excellent academic research, Dr Bannister is extremely active in disseminating knowledge through high-profile outreach and media activities. Asteroid (10463) Bannister was named in her honour.

For these reasons Michele Bannister is awarded the RAS Winton Award.

Short citation

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