11:00AM Astronomy Day 2019 Newcombe Conference Hall

Exploring a New World on the Edge of the Solar System, New Horizons and 2014 MU69



On January 1st, 2019 NASA's New Horizons spacecraft executed a flawless encounter of the small world 2014 MU69 also known as "Ultima Thule". Our understanding of the nature of the outer solar system and processes of planet formation have been transformed by the very first resolved images of 2014 MU69. Now, 4 months after encounter, the imaging and spectroscopy from 2014 MU69 continue to trickle in. I will describe the processes that enable this historic encounter to occur and the initial results from the spacecraft imaging.

Dr JJ Kavelaars received his Ph.D. from the Department of Physics at Queen's University in Kingston ON in 1998. He is an Astronomer at the Dominion Astrophysical Observatory in Victoria and is a member of the Canadian Astronomy Data Centre. His areas of interest include the outer solar system including the Kuiper belt. This specialty enabled him to assist in selecting a followup target for the New Horizons spacecraft after it flew by Pluto. While studying irregular planetary satellites JJ and his team discovered 23 moons surrounding Saturn, Uranus and Neptune. In 2016 he discovered the sixth dwarf planet in the solar system.

