

# The Derby and District Astronomical Society

# Friday 5<sup>th</sup> December 2025 - 7:30pm

## **Dr Julia Cartwright**

The Derby and District Astronomical Society are delighted to announce that on Friday 5th December 2025 at 7.30pm Dr. Julia Cartwright will be presenting a talk titled

Mercury, Meteorites and the BepiColombo Mission

The talk will take place at the Friend's Meeting House, St Helen's Street, DERBY, DE1 3GY.

### Mercury, Meteorites and the BepiColombo Mission

Meteorites remain some of the most important materials for understanding the where, what and why of our Solar System, as they preserve information about key events and processes. For Mercury, as one of the least explored planets, we still don't exactly know how it formed or what is going on at the surface. I'll be discussing how important these cosmic samples are, and how they contribute to our knowledge of how the planets, like Mercury, formed. With the upcoming ESA/JAXA BepiColombo mission on its way to Mercury, and building off of NASA MESSENGER mission data, I'll discuss some of the latest work being done here at the Institute for Space, University of Leicester, in our research to understand the history of the smallest rocky planet in our Solar System.

#### Dr Julia Cartwright

Dr. Cartwright is a planetary scientist, cosmochemist and expert in the study of meteorites, with research focused on understanding the timings, formation and evolution of planetary surfaces. She uses multiple petrological and geochemical analytical techniques to understand both large- and small-scale processes in the Solar System.

Having worked in the field for over two decades, including many notable international research institutions, she is currently an independent research fellow at the University of Leicester, where she is leading research to understand the surface composition of the planet Mercury, as part of the ESA/JAXA BepiColombo team using novel equipment at UoL. She is also involved with in-situ resource utilisation (ISRU) topics, particularly for exploring applications to the lunar surface, as well as studies of meteorites, regoliths and asteroids.