## **Physics Colloquium**

Thursday, 31 October 2024 | 17:00 – 18:00, Seminar Room 3<sup>rd</sup> Floor

X-ray polarimetry: a new window to the Universe

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## **ABSTRACT**

Polarimetry is a very important technique for understanding magnetic fields and high-energy processes in the Universe. In 2021 NASA launched the first X-ray polarimeter, the Imaging X-ray Polarimetry Explorer - IXPE, offering us a completely new window to the Universe, and the tools to study astrophysical systems from a radically different perspective. I will discuss results from IXPE's two-year mission on a plethora of astrophysical systems from magnetars and X-ray binaries to the biggest black holes in the Universe.