Copernicus Webinar and Colloquium Series



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Hunting for Parity-violating Physics in Polarisation of the Cosmic Microwave Background

Tuesday 26 January 2021 14:00 (1 hour)

Polarised light of the cosmic microwave background, the remnant light of the Big Bang, is sensitive to parity-violating physics. In this presentation we report on a new measurement of parity violation from polarisation data of the European Space Agency (ESA)'s Planck satellite. The statistical significance of the measured signal is 2.4 sigma. If confirmed with higher statistical significance in future, it would have important implications for the elusive nature of dark matter and dark energy.

Presenter: Prof. KOMATSU, Eiichiro (Max-Planck-Institute for Astrophysics)