



Contribution ID: 91

Type: **invited presentation**

Fundamental symmetries violations in atoms: theory status, challenges, and outlook

Wednesday 10 September 2025 11:40 (30 minutes)

Studies of fundamental symmetries violations in atoms and molecules provide some of the most confronting tests of the standard model and sensitive searches for new physics beyond. In this talk, I will review the current status and key challenges of the theory related to atomic parity violation and electric dipole moments. I will also discuss how atoms may be used to deduce improved nuclear physics properties, essential for reducing theory uncertainties and increasing the discovery potential of current and future experiments.

Author: Prof. GINGES, Jacinda (The University of Queensland)

Presenter: Prof. GINGES, Jacinda (The University of Queensland)

Session Classification: Session