



Contribution ID: 7

Type: **Invited oral presentation**

Searching for Lorentz Violation at TRIUMF and J-PARC

Wednesday, 22 April 2026 11:20 (20 minutes)

To achieve experimental breakthroughs in quantum gravity, there is significant interest in searching for violations of the gravitational inverse-square law—probing large extra dimensions predicted by string theory—as well as violations of Lorentz symmetry. This talk presents recent progress and upcoming experimental projects in these fields. In particular, we will discuss testing Lorentz invariance by investigating the time variation in the lifetimes of polarized unstable particles and nuclei, with a focus on next-generation projects at the ARIEL facility.

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Session Classification: Future directions in exploring fundamental symmetries with rare-isotopes