

# Questioning Fundamental Physical Principles

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TH Conference room, Bld.4 - 3<sup>rd</sup> floor



The discovery of the Higgs Boson at the LHC marks the apotheosis of quantum field theory, but there is no sign of standard BSM physics, leaving many physicists wondering whether the Higgs is all there is. The standard theoretical framework is beset by paradoxes, such as black-hole physics, the problems of measurement and decoherence in quantum theory. These lead some theorists to question the fundamental principles of Lorentz-invariance, the equivalence principle and locality, with possible consequences for CPT Violation and other matter-antimatter differences. The latter could be probed in experiments at CERN and elsewhere, as well as having implications for Early-Universe Cosmology.

This workshop will bring together theorists exploring these issues as well as experimentalists confronting their ideas.

## Organising committee:

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