

Phenomenology 2025 Symposium



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‘Here be dragons’: Is there new physics beyond quantum theory?

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“New” physics can potentially be witnessed in two ways: firstly, by making familiar experiments more precise, and secondly, by looking for phenomena outside the familiar domain. Even though quantum mechanics (QM) has been extremely well-tested, there is room for novel, although necessarily tiny, effects.

In this talk, I will describe a framework that modifies QM slightly, using parameters that can be experimentally bound, effectively constraining the deviations from QM. Not intended as an empirical competitor to QM in any way, this exercise can help us a) better appreciate the rigidity of the aspects that were modified and b) more interestingly, provide hints for describing phenomena beyond QM. Therefore, this can be a way to explore both the aspects mentioned above: precision tests of QM and novel phenomena beyond QM.

Mini Symposia (Invited Talks Only)

Plenary (Invited talks only)

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