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Quantum Gravity Phenomenology from the Generalized Uncertainty Principle PASQUALE BOSSO, SAURYA DAS, University of Lethbridge — Quantum gravity theories predict modifications of the Heisenberg Uncertainty Principle to the Generalized Uncertainty Principle (GUP), which in turn predicts the existence of a minimum measurable length. In this presentation I will show how GUP modifies standard quantum mechanics, for example that of quantum optical systems and the theory of angular momentum, and how these can be used to test quantum gravity effects in the laboratory.

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