

# On the role of gravity in table-top quantum experiments

*Friday 21 June 2019 09:40 (40 minutes)*

I will discuss the challenges and prospects for isolating and exploring gravity as a relevant coupling mechanism in table-top quantum experiments. This includes quantum limits on the metric generated by a quantum source mass and possible schemes to measure it. Experimentally, a central role is played by the possibility to achieve quantum control over motional states of levitated solid-state particles.

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**Session Classification:** Reference Frames, Relativity and Gravity in QM