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Interferometry setup for LEMING

Tuesday 4 July 2023 21:00 (2 hours)

The LEMING experiment aims to test the equivalence principle for second generation matter, using a cold muonium beam (bound μ^+e^-), where the inertial mass is dominated by the muon.
The feasibility of such a measurement relies on measuring the gravitational deflection of a lifetime limited atomic beam.
The poster discusses the feasibility and developments towards using a Talbot-Lau atom interferometer for a percent level measurement of the gravitational constant in muonium.

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