FAKT Workshop 2023: Particle Physics Retreat



Contribution ID: 5 Type: Theory

Vacuum energy, the Casimir effect, and Newton's non-constant

Thursday 23 February 2023 16:35 (25 minutes)

We explore the possibility that the quantum vacuum energy density of the Casimir effect contributes to a (local) gravitational vacuum energy density.

This hypothesis has several important consequences, reaching from quantum scale-dependence to the prospect of novel experimental insight concerning the

quantum origin of the cosmological energy density associated with the accelerated expansion of the universe.

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