



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.

**Primary author:** KOCH, Benjamin

**Presenter:** KOCH, Benjamin