

# A novel approach to perturbatively renormalizable quantum gravity

*Wednesday, 18 December 2019 15:15 (30 minutes)*

In this talk we review current research into a novel approach to creating a perturbatively renormalizable theory of quantum gravity. This is based on a treatment of Einstein's GR under the exact renormalization group leading to the discovery of operators with negative scaling dimension which resolve the issue of irrelevant operators in interacting gravity. The restriction of these operators to those that are diffeomorphism invariant and the consequences of this are also discussed.

**Primary author:** Mr MITCHELL-LISTER, Alex (University of Southampton)

**Presenter:** Mr MITCHELL-LISTER, Alex (University of Southampton)

**Session Classification:** Parallel Session 1