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Type: **Talk**

A Gravitational Theory on the Lattice

Monday 3 November 2025 15:50 (20 minutes)

This talk will be a follow up of Latham Boyle's talk on discretizing a chiral gauge theory on the lattice. Building up on the natural geometrical discretization of Kahler-Dirac fermions with different polyforms fields (and the tetrad and spin-connection one forms), we will further see how this geometrical picture also suggests a novel formulation of Einstein gravity on the lattice. We will discuss how this discretization scheme preserves the symmetries and (co)homological properties of the continuum manifold. (Joint work with Latham Boyle.)

Parallel Session (for talks only)

Theoretical developments and applications beyond Standard Model

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Session Classification: Theoretical developments and applications beyond Standard Model