



Department of  
Theoretical Physics

# THE QUANTUM SPACETIME SEMINAR SERIES

## Pure Gravity and Conical Defects (Zoom Seminar)

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(McGill University)

**Date:** May 25, 2020

**Time:** 9:00 AM IST

Zoom link shall be shared  
separately



I will describe the challenges and progress in constructing a theory of "pure gravity" in three dimensions, i.e. a theory which contains only metric degrees of freedom and nothing else. Conformal bootstrap techniques provide strong constraints on the theory, and indicate that the theory contains new states in addition to gravitons and black holes. I will provide an interpretation for these new states as conical defects.