



Department of  
Theoretical Physics

# THE QUANTUM SPACETIME SEMINAR SERIES

## Continuum Quantum Field Theories for Fractons (Zoom Seminar)

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**Date:** May 18, 2020

**Time:** 6:00 PM IST

Zoom link shall be shared  
separately



Starting with a lattice system at short distances, its long-distance behavior is captured by a continuum Quantum Field Theory (QFT). This description is universal, i.e. it is independent of most of the details of the microscopic system. Surprisingly, certain recently discovered lattice systems, and in particular models of fractons, seem to violate this general dogma. Motivated by this apparent contradiction, we will present exotic continuum QFTs that describe these systems.