



PHYSICS AND ASTRONOMY SEMINAR

(In-person & Online)

Dr. Andreas Karch
UT Austin

“Exploring continuum quantum field theories of fracton order”

Recently discovered solvable lattice models, known as fractons, have forced us to rethink the very basic question of what a quantum field theory is. In order to describe the continuum limit of fracton lattice models, novel quantum field theories had to be written down that go beyond what textbooks taught us, exhibiting unusual features such as subsystem symmetries, UV sensitivity of IR quantities, and broken rotation invariance. This talk will describe several explorations of the interesting new properties these unusual field theories exhibit.

Thursday, October 21, 2021
11:00am PDT

Elliott Building Room 105

Join us to watch the virtual seminar together in ELL 105 or remotely
using the zoom link

<https://uvic.zoom.us/j/82265639484?pwd=SjBvayswbThiZG1vcWpPMmNoVHBxUT09>).