

UC SANTA BARBARA Kavli Institute for Theoretical Physics

presents:



1221 State Street #205 Santa Barbara, CA 93101

Playing dirty: Excavating new particles

WEDNESDAY AUGUST 23

Café KITP

6:00 - 7:00 PM

Doors open at 5PM



Particles even smaller than atoms are the building blocks of matter, manifestations of energy, and might even describe gravity; they affect everything from technology to the evolution of our universe. What are these mysterious fundamental particles like, and how do they interact with each other? Scientists are engaged in a massive effort to construct a theory of particles that answers those questions, and sophisticated computational and mathematical techniques have become an integral part of their toolkit. Over dinner and drinks, **KITP Postdoctoral Scholar Jessica N. Howard** will share one way machine learning and math originally designed for moving dirt might help us answer the fundamental question: *what is our universe made of*?

Please note: Seating is first-come, first-served. Food and drinks will be available for purchase.