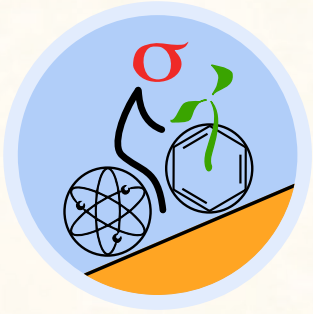


In science and education alike, no one becomes an expert overnight!



Young Educators and Scientists

Lecture Series by SigmaCamp

Come to *YES Lectures* to see college and PhD students share their passion for science in all areas of STEM, and answer questions about what their experience on the path to becoming an expert scientist is like!

Thursday, May 5th
6 PM EST, hybrid!

**Simons Center for Geometry and
Physics, Stony Brook University,
and zoom!**

more info at sigmacamp.org/yes

Gravity, Holography, and Black Hole Information

by Alexander Frenkel, *PhD Student at Stanford University*

Since the introduction of quantum theory and quantum field theory in the 1930s, physicists have sought a “quantum theory of gravity” - a systematic understanding of how non-deterministic notions of probability and probability amplitudes from quantum mechanics apply to the fluctuating geometry of space and time. There have been fascinating recent breakthroughs in the context of an idea that emerged in the late 1990’s dubbed “holographic gravity.” In this talk, I will show the beautiful fractal nature information theory takes on in the context of holographic gravity, and fundamentally new things it has taught us about the resolution of the information paradox and the nature of quantum gravity more broadly.



**Event open to all: recommended to middle and high school students
and parents**

Learn more at sigmacamp.org/yes
Questions? email: info@sigmacamp.org