



Department of Physics and Astronomy  
FALL 2021 Colloquium Series - Virtual

# “How Hole-y is your Spacetime? aka How to Measure Topology in Quantum Gravity”

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In this talk, I will introduce the field of Quantum Gravity and my favorite candidate framework: String Theory. Furthermore, I will discuss the AdS/CFT (Gauge/Gravity) duality, which is a tool for answering questions in Quantum Gravity. Finally, we will explore how to measure the topology of a quantum spacetime and specifically address whether topology can be represented by a linear operator on your spacetime or not.

**Thursday, Sept. 16, 2021**  
**4:00 - 5:20PM**

Talk will be via Zoom - contact [physics@csus.edu](mailto:physics@csus.edu) for links  
or visit our Colloquium Spotlight at [www.csus.edu/physics](http://www.csus.edu/physics)

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