



Laboratory for Elementary Particle  
Physics (LEPP)

# Theory Seminar

## Gauge/Gravity Duality and the Eguchi-Kawai Mechanism



**Edgar Shaghoulian**

*Cornell University*

Holographic field theories have a number of striking properties inferred from a dual gravitational description. Much recent work has focused on reproducing these properties purely from a field theory perspective, often invoking conformal invariance. As holographic field theories are always formulated as some sort of (not necessarily conformal) gauge theory, this suggests analyzing special aspects of gauge theories. In this talk, I will discuss how the Eguchi-Kawai mechanism in gauge theory captures many features of an emergent gravitational description. I will further discuss the extensions to the Eguchi-Kawai mechanism suggested by gauge/gravity duality

**Wednesday, October 25th, 2017**

**2:00pm**

***401 Physical Sciences Building***