



LABORATORY FOR ELEMENTARY-PARTICLE  
PHYSICS (LEPP)

# Theory Seminar



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**Black Holes, and Nuggets,  
and Blobs. Oh my!**

The past few years have seen a growing interest to explore dark matter candidates that are outside of the standard WIMP paradigm. A resurgence of macroscopic dark matter candidates have brought with it a mix of whimsical names — primordial black holes, asymmetric dark matter nuggets, and dark blobs — to name a few. In general the difficulty with macro dark matter is not the observational constraints, which are typically quite sparse and weak, but rather the challenge is finding a well-motivated mechanism for producing gram-sized dark matter objects. In this talk, I will argue that “dark quark nuggets” are a generic prediction of confining, hidden-sector gauge theories. I will discuss the phenomenology of these theories, the cosmological production of dark quark nuggets, and their observational probes.

**Friday, October 26, 2018**  
**12:30pm**  
**401 Physical Sciences Building**