LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS (LEPP)

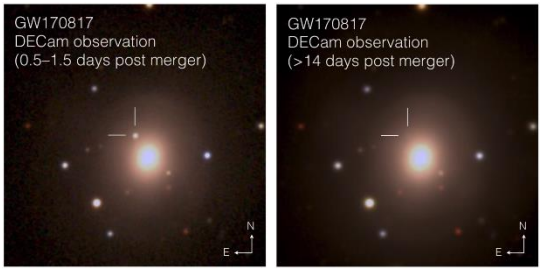
Joint Experimental and Theory Seminar in Particle Physics and Cosmology:

Observation of a Gravitational Wave Emitting Neutron Star Merger with the Dark Energy Camera

Motivated by the exciting prospect of new wealth of information arising from the first observations of gravitational and electromagnetic radiation from the same astrophysical phenomena, the Dark Energy Survey (DES) has performed a broad range follow-up program for LIGO/Virgo events using the Dark Energy Camera (DECam). In this talk, I present the discovery of the optical transient associated with the neutron star merger GW170817 using DECam and discuss its implications for the emerging field: multi-messenger cosmology with gravitational waves and optical data.

Marcelle Soares-Santos

Brandeis University



Friday, October 27th, 2017
1:00pm
401 Physical Sciences Bldg.

LEPP and CHESS resources have merged and a new lab, (CLASSE), has formed. LEPP's primary source of support is the National Science Foundation. Visit us at www.lepp.cornell.edu