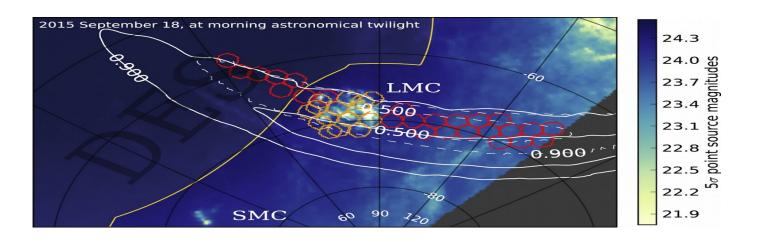


## Discovering a new approach to cosmology with the Dark Energy Survey and Gravitational Waves.

## Marcelle Soares-Santos (FNAL)

## Tuesday, 11 April 2017, 16:45 h, DESY Auditorium



Motivated by the exciting prospect of new wealth of information that will arise from observations of gravitational and electromagnetic radiation from the same astrophysical phenomena, the Dark Energy Survey (DES) Collaboration has performed a broad range follow-up program for LIGO/Virgo events using its Camera (DECam). In this talk, I present an overview of this effort, including results of searches for signatures of the first two LIGO-triggered binary black hole mergers in the 2015-2016 observing campaign and status of the ongoing 2016-2017 campaign. I will also discuss plans for upcoming seasons and long term prospects for this exciting emerging field: multi-messenger cosmology with gravitational waves and optical data.

- Coffee, tea and cookies will be served at 16:30h
- After the seminar there is a chance for private discussions with the speaker over wine and pretzels

