

**Special Event:**  
**Lecture & Lunar Eclipse Stargazing**

**The Dawn of the Age of Gravitational-Wave  
and Multi-Messenger Astronomy**

A lecture by Jameson Rollins

Sunday, January 20th

Lecture: 7:00-7:30PM

Lunar Eclipse & Stargazing: 7:30-10:00PM

Cahill Center for Astronomy and Astrophysics  
California Institute of Technology

The world-wide network of gravitational wave detectors led by LIGO has now observed 11 astrophysical gravitational-wave events: ten from merging black holes and one from the merger of two neutron stars. The neutron star merger was of particular interest since it was followed up with traditional astronomical observations by almost every telescope on the planet. This event heralded the true beginning of the age of multi-messenger astronomy, where scientists observe an astronomical event by two distinct physical "messengers", in this case gravitational waves and light. This talk will recap these discoveries and forecast some of the exciting things that await us in this new age of astronomy.

These are free lectures at a public level followed by guided stargazing with telescopes (weather permitting). All events are held at the Cahill Center for Astronomy and Astrophysics at Caltech. No reservations are needed. Lecture is 30 minutes, stargazing and eclipse viewing lasts until 10:00PM. Stay only as long as you want. For directions, weather updates, and more information about our series of events, please visit:

<http://outreach.astro.caltech.edu>