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2018 James R. Neff Public Lecture
Tuesday 16 October 4:15PM
Room 105 Umberger Hall
Refreshments at 3:45 outside 105 Umberger

Einstein, Gravitational Waves, Black Holes & Other Matters

A century ago Einstein predicted there were ripples in the fabric of space-time traveling at the speed of light: gravitational waves. On 14 September 2015 the LIGO detectors in Hanford, WA and Livingston, LA made the first detection ever of a loud gravitational wave traveling through Earth, created over a billion years ago by two merging black holes. Other gravitational waves from black holes have been detected since then, as well as one by LIGO and the Virgo detector in Europe produced by two neutron stars giving birth to a black hole, that also generated electromagnetic waves (light!) seen by many telescopes, and helped us understand the origin of gold. We will describe the history and details of the observations, and the gravity-bright future of the field.

