

Detection of Gravitational Waves

Dr. Peter Beyersdorf • 7:00 pm • CSM Theatre



On September 14, 2015, the Laser Interferometer Gravitational-wave Observatory (LIGO) received the first confirmed gravitational wave signals. The event represents the coalescence of two black holes that were previously in mutual orbit. LIGO's exciting discovery provides direct evidence of what is arguably the last major unconfirmed prediction of Einstein's General Theory of Relativity. This talk will provide context for this announcement, describe what gravitational waves are and how they were detected. Later detections and the implications for astrophysics and the significance of this detection will also be discussed.

Dr. Peter Beyersdorf: Associate Professor of Physics and Astronomy at SJSU, former member of the LIGO Science Collaboration and researcher at the TAMA300 gravitational wave detector