

CONTROL ID: 2605074

SUBMISSION ROLE: Special Session

DATE/TIME CREATED: September 12, 2016, 5:40 PM

TITLE: Spacetime Symphony: APOD and Gravitational Waves

Abstract (2,250 Maximum Characters): In 1915, Albert Einstein published his General Theory of Relativity. In this theory, gravity is not a force, but a property of space and time in the presence of massive objects. A century later, on September 14, 2015, the Laser Interferometer Gravitational-wave Observatory (LIGO) received the first confirmed gravitational wave signals. Now known as GW150914, the event represents the coalescence of two distant black holes that were previously in mutual orbit. The LIGO-Virgo Scientific Collaboration planned a detailed social media strategy to publicize the February 11, 2016 press conference that announced this discovery. Astronomy Picture of the Day (APOD) was a major factor in disseminating the now iconic imagery that was developed, and the LVC worked closely with APOD to ensure that the secrecy would be maintained throughout the press embargo period. Due to the success of our efforts, we repeated the process for the AAS press conference that announced GW151226, the second confirmed gravitational wave event. We have also repurposed the APOD imagery for an online course for community college instructors, as well as in a poster that will be available through CPEPphysics.org (Contemporary Physics Education Project).

PRESENTATION TYPE: Special Session Oral

CURRENT SESSION TYPE: Astronomy Picture of the Day: Creative Uses in the Classroom and Beyond

CURRENT CATEGORY: None

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Contributing Teams: LIGO-Virgo Scientific Collaboration