HOUSE RESOLUTION NO. 2016-4668, by Representatives Haler, Griffey, Johnson, Kilduff, Fitzgibbon, Pollet, Ryu, Smith, and Dent

WHEREAS, The existence of gravitational waves has been detected for the first time, 100 years after Albert Einstein predicted their existence in 1916; and

WHEREAS, Two black holes collided to create the waves seen at two locations of the Laser Interferometer Gravitational-Wave Observatory, one at Hanford in Washington State and the other in Louisiana; and

WHEREAS, Scientists believe that the two black holes in this event were about 29 and 36 times the mass of the sun, and that this collision converted three times the mass of the sun into gravitational waves within one second; and

WHEREAS, The peak power output of this event was about 50 times that of the combined power of all the stars in the visible universe; and

WHEREAS, Physical events in space, like the collision of black holes, the collapse of stars, or changes in the speed or direction of large objects create gravitational waves; and

WHEREAS, Being able to detect and measure gravitational waves will advance our knowledge of astronomy and physics and could cause a new understanding of time and space to be formed; and

WHEREAS, The National Science Foundation has been working toward the detection of gravitational waves for 40 years, spending about $1 billion to date; and

WHEREAS, Albert Einstein lacked the means to prove the existence of gravitational waves, or that a century would pass before modern science could demonstrate what he knew to be true;

NOW, THEREFORE, BE IT RESOLVED, That the House of Representatives express its thanks and appreciation to the Laser Interferometer Gravitational-Wave Observatory project directors and managers, and to the international team of scientists and technicians who conducted these experiments, for their dedication to scientific discovery; and

BE IT FURTHER RESOLVED, That the House of Representatives recognize the value of the advancement of our understanding of Einstein's general theory of relativity and of any practical applications for this knowledge that we do not yet realize; and

BE IT FURTHER RESOLVED, That copies of this resolution be immediately transmitted by the Chief Clerk of the House of Representatives to the National Science Foundation, the California Institute of Technology, the Massachusetts Institute of Technology, and the President of the United States.

I hereby certify this to be a true and correct copy of

Resolution 4668 adopted by the House of Representatives

February 29, 2016

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Barbara Baker, Chief Clerk