

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

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

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

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

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

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

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

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

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

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

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

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

18  
19               I hereby certify this to be a true and correct copy of  
20               Resolution 4668 adopted by the House of Representatives  
21   February 29, 2016  
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   Barbara Baker, Chief Clerk