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WASHINGTON



United States Senate  
WASHINGTON, DC 20510-4705

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LIGO Hanford Observatory  
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Dear Friends,

Welcome to the Advanced LIGO Dedication Ceremony. Today we celebrate the unveiling of some of the most sensitive instruments ever devised and their potential to increase our understanding of the cosmos and our place within it.

Later this year, on the 100<sup>th</sup> anniversary of Albert Einstein's Theory of General Relativity, Advanced LIGO will conduct its first observations. It will chronicle the last moments of existence for neutron star-pairs and black holes as they coalesce into one larger black hole. These observations will expand our understanding of the universe by providing the most precise measurements achievable with today's technology.

Advanced LIGO stands as a triumph of human ingenuity and collaborative design. Designed and operated by Caltech and MIT for the National Science Foundation, Advanced LIGO will take its place among a worldwide network of detectors. 950 scientists at Universities in America and 15 other countries carry out LIGO research to investigate the origins of our universe and the lifecycles of stars. Their cutting-edge research holds tremendous potential for increasing human knowledge of astronomy, physics, and potentially many more fields of study.

Thank you all for coming out to celebrate this occasion, and the years of hard work that led up to it. This year, advanced LIGO will begin the next phase of its search – with a thousand-fold increase in the number of galaxies it can explore for gravitational wave signals. May its search provide answers that illuminate the building blocks of the universe and promote human understanding and scientific collaboration.

Warmest Regards,

Maria Cantwell  
United States Senator