



The Senate

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Hawaii State Senate Commemorates 20th Anniversary of W.M. Keck Observatory

Honolulu – The Hawaii State Senate today recognized and commemorated the 20th anniversary of the W.M. Keck Observatory, located at the summit of Mauna Kea, during its Session.

The telescopes, known as Keck I and Keck II, are located in the twin domes of the W.M. Keck Observatory and have been involved in the 20 years of exploring the universe to search for Earth-like planets around other stars. Keck I's first science observations took place in 1993, while Keck II's took place in 1996. The domes sit on a site 13,796 feet above sea level, providing a view that is largely unobstructed and undisturbed of spectacular celestial images.

“Under Hawaii’s dark skies, astronomers at Keck Observatory have accomplished many discoveries over the past two decades. Like a Hawaiian navigator who holds a vast knowledge of the stars to guide him and his crew to their destination, the astronomers at Keck continue to use their boundless knowledge of the universe to guide us into the future,” said Senator Malama Solomon, who represents District 4, encompassing Hilo, Hamakua, Kohala, Waimea, Waikoloa, and Kona. “I congratulate Dr. Taft E. Armandroff, Director of the W. M. Keck Observatory, for operating one of the world’s leading astronomical research facilities and for developing resources that will sustain Keck Observatory’s role at the forefront of astronomy for decades to come.”

Keck’s Astronomers studied a supernovae and found evidence of a mysterious repulsive force in physics: dark energy. The 2011 Nobel Prize in Physics was awarded for this ground breaking research. In addition to the discovery of the dark energy, astronomers used the Keck II telescope’s infrared adaptive optics and looked through the dust and gas that block our visible light view into the center of our own Milky Way galaxy. The Keck telescopes equipped with adaptive optics have found and proved that the Milky Way has a supermassive black hole at its center. Since then, it is generally agreed that most galaxies have black holes at their center. After discovering what appeared to be an object larger than Pluto in the outer solar system in 2005, Caltech’s Mike Brown and his team quickly turned to the Keck II telescope and its atmosphere-

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penetrating adaptive optics to get a brighter, clearer look. Following their closer look, they introduced to the public an entirely new population of cosmic objects in our solar system now known as “dwarf planets.” In 1998, astronomers on the Keck II Telescope discovered evidence of a budding solar system around a moderately young star 220 light years away from Earth. The powerful capabilities of the Keck telescopes allowed observers to determine that a dust ring around the star was a critical missing link in the evolution of solar systems.

(Photo Caption: Sen. Malama Solomon presents the Senate Certificate of Recognition to Dr. Taft E. Armandroff, Director of the W. M. Keck Observatory.)

(Photo Courtesy: The Office of Senator Malama Solomon)

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