

Keck Interferometer Science: present and future

The Keck Interferometer began science observations in June 2002 using the 10-meter Keck telescopes in visibility amplitude mode. Since then, a wide range of astronomical objects have been observed, from T Tauri stars to the center of a Seyfert galaxy. I will discuss some of the scientific results of the shared-risk observing programs, highlighting topics new to the era of large aperture interferometry.

For example, observations of the Seyfert 1 galaxy NGC 4151, the first extra-galactic object detected with infrared interferometry, revealed that the majority of the near-infrared emission from the center of the galaxy arises from a region less than 0.1 in diameter. Additionally, I will describe some of the science goals of the next interferometer modes to be developed, nulling and differential phase.

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