



W. M. Keck Observatory

ADAPTIVE OPTICS SPECIALIST/SCIENTIST

The W. M. Keck Observatory operates the world's two largest optical/infrared telescopes located on the summit of Mauna Kea on the Big Island of Hawaii. Both telescopes are equipped with AO systems which are routinely used in both Natural and Laser Guide Star AO modes. These systems have been extremely productive scientifically. New, more capable, systems are currently in design and development, including the implementation of a new laser, new laser launch telescope, near-infrared tip-tilt sensor and a facility to provide simultaneous AO-corrected point spread function estimates to support science data reduction.

The AO Specialist/Scientist will be expected to play a lead role in all phases of the development of new AO capabilities from the concept phase through the design and development, commissioning and handover to operations; as well as in the characterization, optimization and improvement of the existing AO systems. The Specialist will also be expected to help guide the development of the Observatory's high angular resolution capabilities.

Minimum requirements for this position include: Ph.D. level degree in AO or high angular resolution astronomy or equivalent experience; three years of relevant experience in the development and/or use of AO for astronomical research; two years of work experience in instrumentation development or operations; a broad understanding of the multiple engineering disciplines needed to develop AO systems; and experience in data visualization and analysis. Desirable qualifications include: a proven track record in the development or optimization of AO systems for astronomy; demonstrated leadership skills; optical, mechanical and controls design and engineering expertise; expertise in the development of the high level software needed to operate and optimize AO systems; and previous Observatory experience.

The following skills are required: Good written and oral English communication skills, ability to work independently and as part of a team, strong project and time management skills; ability to set priorities and meet deadlines with flexibility.

This is a regular position with a competitive, comprehensive benefits package including relocation assistance and private school (K-12) tuition support for dependent children. Salary is dependent upon qualifications and experience.

Additional information about WMKO and this position may be found on our web site at www.keckobservatory.org

EEO EMPLOYER