Progress on adaptive optics for astronomy in Key Laboratory of Adaptive Optics, Chinese Academy of Sciences

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Abstract

The Key Laboratory of Adaptive Optics, Chinese Academy of Sciences specializes in research of adaptive optics, including the theories study, devices manufacture, and system development. The recent progress on adaptive optics (AO) for astronomy are reported in this presentation. For astronomical observations, the recent AO systems developments for 4-meter night-time optical telescope, 1.8-meter solar telescope and the 1-m New Vacuum Solar Telescope (NVST) at Fuxian Lake Solar Observatory are presented respectively. The technological advancement, such as Laser Guide Star, Pyramid Sensor and Deformable Secondary Mirror, are also introduced.

Keywords: adaptive optics, deformable mirror, wavefront sensor, Laser Guide Star, Pyramid wavefront Sensor, Deformable Secondary Mirror

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