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## Developement of the optical lock-in phase camera

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Phase cameras are devices which perform differential wavefront sensing at high spatial resolutions. The intended purpose of these devices is to provide high resolution amplitude & phase maps of the various RF control sidebands for diagnostic purposes during commissioning. The increased spatial resolution allows the sensing of high order modes which may be key to understanding unsolved commissioning problems such as offsets in the RF error signals, precise mode matching & thermal actuator effects.

This work focuses on the continued development of the University of Adelaide design of phase camera, known as the optical lock-in camera. It also provides a general background of phase cameras and recent work on their applications.

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