

SOUL Modal Gain Machine

Tuesday 29 October 2019 11:10 (20 minutes)

SOUL has been developed to improve LBT FLAO performance reducing detector noise and increasing wavefront sampling and correction frame rate, but an accurate optimization of the control system is required to fully exploit its potential. Thus, an online modal control optimization has been designed and implemented considering the peculiarities of the Pyramid Wavefront Sensor. We will describe the method used with particular attention to the aspect related to the Pyramid WFS and report laboratory and on-sky results from the commissioning of SOUL.

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