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# NIRSPEC

UCLA Astrophysics Program

U.C. Berkeley

W.M.Keck Observatory

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George Brims

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## NIRSPEC Cryomechanics Design Note 13.00 TMA

### Introduction

The TMA (Three Mirror Acromat) is the final camera section of the optical path. It is an extremely critical and difficult component of the whole system, so we will have it made as a unit by an optical vendor. The vendor will not only make the mirrors but also align and cryogenically test the camera.

### What next?

The design of this section is almost complete, and a bid package is almost ready for submission to various vendors. There are two main tasks we have to complete before sending out the bid package. The first is to make sure that we have a design for the mechanical interface between the optical plate and the TMA, which will enable us to set the alignment of the TMA to the rest of the system, while supporting the camera properly and providing an adequate cooling path. The second is making sure the interface to the detector head is properly defined so that we can get the detector to the exact focus position and still have it thermally and electrically isolated from the rest of the system.