The NGAO Instruments Working Group

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INTRODUCTION

The NGAO project has two major development areas, the AO system and instrumentation for use with the AO system. At the present time the AO system portion is funded for a system design (SD) phase of approximately 17 months duration. Within this project limited funding is provided primarily to support limited development of requirements for NGAO instrumentation.

A NGAO Instruments Working Group (IWG) is proposed for the purpose of focusing on instrument related matters for NGAO. This group will operate during the NGAO SD phase and the efforts of this group will be directed at developing and documenting the top level requirements for NGAO instrumentation. The group will provide the instrument specialist perspective to the NGAO system engineering effort and will assist the AO system designers with issues such as allocation of function between AO system and instrumentation, interface and integration issues and other matters related to instrumentation as required by the SD process. The group will also provide a report on the suitability of OSIRIS and NIRC-2 for use with NGAO in the role of a single object near-IR IFU and an L and M band imager respectively.

The work of the NGAO IWG will also have the objective of preparing requirement and related documents that will enable a proposal process to take place at the appropriate time for actual work on the SD phase of each NGAO instrument. While all instruments will be considered, the main focus of effort will be on the near-IR deployable IFU, and the near-IR and visible wavelength imagers and the visible IFU.

ORGANIZATION

The NGAO IWG will have between 6 and 8 members. At least three of these will be funded members whose work will constitute the instrument related hours in the NGAO SD phase plan. At present two individuals are specifically identified in this context, Sean Adkins, WMKO and Anna Moore, CIT. If there are four total members funded from NGAO the following would describe their general roles:

Sean Adkins – chair of IWG, overall systems, detectors, electronics and interfaces
Anna Moore – instrument generalist, optical and mechanical
TBD – instrument generalist, optical and mechanical, experience with cryogenics
TBD – software engineer

The balance (3 or 4 persons) of the NGAO IWG would be volunteer members who are also members of the NGAO science team. If possible these would be members of the NGAO science team with interest/experience in instrumentation and they would be the primary contact points for bringing instrument related science requirements from the work of the NGAO science team to the IWG.