LISAA – Low Inclination Search for Approaching Asteroids. M. Fauerbach[1], M. P. Lucas[1], and M. J. Mon[1], [1]Florida Gulf Coast University, College of Arts and Sciences, 10501 FGCU Blvd., Fort Myers, FL 33965-6565.

Introduction: There are an estimated 10^5 Near Earth Objects (NEOs) larger than 100m in diameter. At the present there are only 2190 known NEOs, many of which are smaller than 100m in diameter [1]. Over the past few decades there has been convincing evidence that impacts of asteroids and comets have played a significant role in the evolution of life on Earth [2]. The threat that NEOs pose to civilization and the fact that NEOs might represent economically attractive mineral resources for the future emphasize the importance of locating and cataloguing these objects. Despite these facts, there are few observers to perform follow-up observations on NEO discoveries made at one of the major asteroid detection programs such as LINEAR, LONEOS, NEAT and Spacewatch.

Objective: The majority of the asteroid tracking and search projects are located in the northern hemisphere [3]. The recently completed Evelyn L. Egan Observatory on the campus of Florida Gulf Coast University is located at 26.5° North latitude, ideally situated to observe a large portion of the southern celestial sphere. This location can provide valuable observations of low declination NEOs that can't be reached by more northerly observers. Approximately 80% of the minor planets have inclinations less than 20° to the ecliptic plane, the main objective of the **LISAA** project will be to observe the area of sky within 20° south of the ecliptic plane. Contrary to popular belief, born from the fact that South Florida is only a few feet above sea level, South Florida offers many clear and steady nights in an observing season that spans roughly October through May. This eight-month span would be the typical main observing interval of the **LISAA** project each year.

Method: The Egan Observatory's automated 16" Ritchey-Chretien telescope equipped with an Apogee AP7ap CCD camera will be employed to take stereo-paired images covering 0.1deg^2 of sky in an effort to detect previously unknown NEOs and to recover recent NEO discoveries from other search programs for follow-up astrometric observations. Furthermore, photometric studies using BVRI filters will provide valuable information about the rotational and compositional properties of some of the brighter Near Earth Objects. Due to the immense number of asteroid discoveries these are areas where observations are lacking.

Results: With the commissioning of the Egan Observatory scheduled to be completed by the end of 2002, preliminary results for the first two months of operation of the LISAA project will be presented. These results will be of particular interest to other small observatories and amateur astronomers interested in engaging in NEO search and follow-up studies.

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