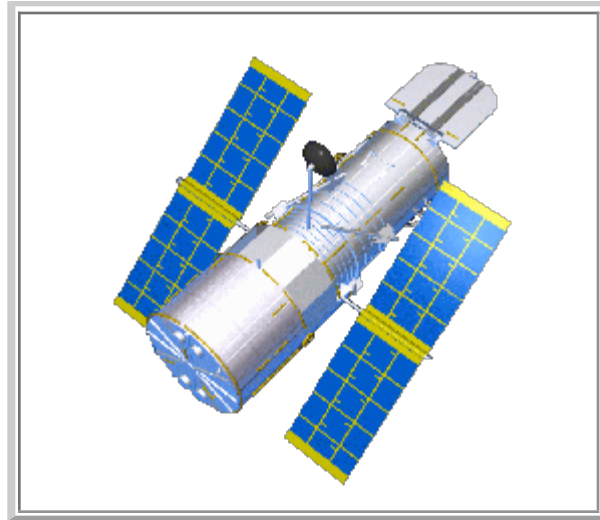


New Jersey Hubble Amateurs



General Information

Over the past few years there has been a program at NASA that allowed amateur astronomers to submit projects for the Hubble Space Telescope. Only a few dozen amateurs in all were accepted. However, within that small number were four New Jersey Amateurs (more than any other state) ... George Lewycky, Karl Hricko and Lew Thomas, and Jim Flood. I have included some information about the individuals, the title of their projects, along with the overview abstracts that describe the projects. However, if you are interested in finding more about Amateur Astronomers and the Hubble Space Telescope, you can go to [this site](#). Or, if you want to get information on their specific projects you can go [here](#). This second page will allow you to search the Hubble Space Telescope observing programs and view the abstracts and data sets for them.

George Lewycky George is a computer programmer and a member of AAAP. He researched the atmosphere of Saturn's largest moon Titan. Using Hubble's Goddard High Resolution Spectrograph (HRS/GHRS) he observed Titan's atmosphere in the middle ultraviolet (UV) spectrum in search of formaldehyde. George maintains a [Hubble web page](#) where he discusses his work.

Title: Titan's Atmosphere and Evolution Thru Disk Resolved Spectroscopy - Proposal 4790

Abstract : By using disk resolved spectroscopy with HST's HRS, a search for formaldehyde (CH_2O) will be performed on Titan. Formaldehyde is known to serve as an oligomer to Hydrogen Cyanide resulting ultimately in simple

precursors, purines and pyrimidines (e.g., adenine, uracils) necessary for DNA.



Karl Hricko & Lew Thomas Karl is a science teacher and Lew is a retired engineer. Both are members of AAI. Their research was searching for a bridge connection between a Galaxy and Quasar using the WFPC (Wide Field Planetary Camera)

Title: WFC Observations of NGC4319-Markarian 205: High Resolution Morphology of a Galaxy-Quasar Association Displaying an Anomalous Redshift - Proposal 4750

Abstract: This program involves use of the Wide Field Camera to image NGC 4319 and Mrk 205 in order to examine the morphology of this association. The purpose is to attempt to gain more information about the nature of the filamentary material located between this galaxy-quasar pair. Imaging will be done in two well calibrated filters, F555W and F785LP, in order to provide a good color base-line and spatial map of the spectral characteristics of the material surrounding Mrk 205. These will also be co-added to increase the S/N and increase the level of detail detected in the structure of the material surrounding the quasar. The Wide Field Camera has been chosen instead of the Planetary Camera on the basis of recommendation by image restoration experts at STScI because, despite its lower spatial resolution, the Wide Field Camera will offer a greater chance of detecting any bridging material which may be present due to the fact that there will be more integrated light per pixel in the WFC than the PC.

Jim Flood Jim is a chemist by profession, an AAI member, and is the LAST of 13 amateur projects to be scheduled on the Hubble Space Telescope. He also is an AAI member. His research is the Morphology of the active nucleus and radial filaments of NGC 1808, using the WFPC2 instrument. His observations of NGC 1808 were made on August 14, 1997. If you would like to see some of Jim's work, we have a page set up [here](#). These images may be found nowhere else on the web.

Title: Morphology of the active nucleus and radial filaments of NGC 1808 - [Proposal 6872](#)

Abstract: A high resolution examination of the galactic core of NGC 1808 can resolve questions as to the nature of it's energetic core "hot spots" variously attributed to unusual circumnuclear starburst activity, massive supernova remnants or black hole accretion disk models. Also present are pronounced radial dust filaments streaming from the core of NGC 1808 in association with large gaseous polar outflows, suggestive of galactic fountaining.

If you would like to view some of the results of these projects in the HST Archives, just press [HERE](#). Enter the Proposal ID (4750 - Hricko, Thomas, 4790 - Lewycky, or 6872 - Flood) in the box, and press the "Search" button. Abstracts and data are available.

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