

Rutgers, The State University of New Jersey
Department of Physics and Astronomy
Piscataway, New Jersey 08855-0849

This report covers the period September 1995 to August 1996.

1. PERSONNEL

The astrophysics faculty at Rutgers University for academic year 1995-1996 consists of the six members from previous years: T A Matilsky, D Merritt, C Pryor, J A Sellwood, T B Williams, and H S Zepolsky plus Charles L Joseph who joined as a research faculty member in January 1996. John P Hughes arrives from Harvard-Smithsonian Center for Astrophysics in September 1996.

There are currently two postdoctoral visitors, Gerald Quinlan and Elizabeth Moore, and six graduate students: Victor Debattista, Tema Fridman, Povilas Palunas, Arend Sluis, Benoit Tremblay and Ben Weiner.

2. RESEARCH PROGRAMS

The research interests of the group at Rutgers encompass both observational and theoretical programs in galactic and extragalactic astronomy. The observational work is both ground based, principally at the National Observatories, and space based, using mainly the Hubble Space Telescope and X-ray satellites. There is also a substantial instrumentation effort, including Joseph's membership of the Space Telescope Imaging Spectrograph instrument team.

3. FACILITIES

The Rutgers Imaging Fabry-Perot Spectrometer is available to the entire US astronomical community through an agreement between Rutgers and CTIO. In the last 12 months, this popular instrument was requested for 50 nights on the 4 m telescope and 49 nights on the 1.5 m. Rutgers provides advice on proposal preparation, observation, and data reduction. In return, Rutgers receives some support for travel to Chile and some telescope time.

At Rutgers, Joseph has a well-equipped laboratory for

characterizing optical and ultraviolet astronomical detectors.

There is a domed 20-inch instructional telescope on the roof of the our building. It is computer controlled and a CCD camera and fiber-fed CCD spectrograph are under construction. They will be used with the telescope for undergraduate and graduate training.

The astronomy group has an increasing number of high performance and image processing computer workstations and has access to many more supported by the Department.

4. GRADUATE PROGRAM

The Graduate Program now has separate Physics and Astronomy options with differing course and examination requirements. In the past year we have expanded the graduate curriculum in astronomy to offer an introductory course plus separate advanced courses covering six major areas of astronomy.

Students taking the astronomy option are expected to do research with one of the above listed faculty members, but research opportunities relating to the interests of other members of the Department, e.g. the early universe, exist also within the physics option.

Four students have graduated with astronomy related theses in the past five years and three more are expected to finish this year.

5. FURTHER INFORMATION

Further details relating to the facilities, graduate program, and full descriptions of specific research activities at Rutgers can be found on our web page: <http://www.physics.rutgers.edu/ast/group-ast.html>

A complete, and continuously updated list of papers submitted, in press and appeared with full citation, is available at: <http://www.physics.rutgers.edu/ast/RAPs.html>

J. A. Sellwood