

Preface

The history of physics and astronomy at Rutgers began in 1771 when Queen's College first opened its doors to a handful of students. Although the College was established primarily to prepare students for the ministry in the Dutch Reformed Church, its curriculum was typical of that at the other colonial colleges. In addition to studying Latin and Greek, the students studied natural philosophy, or physics. They probably also studied navigation, including some of the rudiments of astronomy. In the years that followed, advances in physics and astronomy were included in the course of studies.

As I was finishing sixteen years of service as Chair of the Department of Physics and Astronomy, I became interested in putting together a history of physics and astronomy at Rutgers. Paul Leath, the present Department Chair, encouraged me to carry this history to the present date. I have also received encouragement and support from others of my physics colleagues.

I have considerable personal knowledge about the recent history of the University and of the Department. My father came to Rutgers in 1918, and was at Rutgers as an undergraduate student, graduate student, and faculty member until he retired about 1960. My mother was a home economics extension specialist at the University for over thirty years. I came to Rutgers as an undergraduate student in 1949 and graduated from the Physics Department in 1952. After graduate school at Yale, I returned to Rutgers as a member of the physics faculty in 1956, and I remained in the Department until I retired in 1997. I was Department Chair from 1979 until 1995.

A history written by an author who was a part of that history has advantages and disadvantages. The involvement of the author in the history of the Department creates a conflict of interest and a personal bias that is hard to avoid. The reader should keep in mind that this history is written by an author who was a part of that history, and that his involvement in that history both enhances and biases that history.

I knew or met many of the earlier faculty members in the Department, beginning with George Winchester, who came to the Department in

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1921, David Porter, who joined the Department in 1923, and Lloyd Greenlees, who joined the Department in 1924.

This history focuses on physics and astronomy at Queen's College, Rutgers College, the College of Arts and Sciences, the Faculty of Arts and Sciences, the New Jersey College for Women, and Douglass College. In this history, I have not reviewed physics at the Newark and Camden branches of the University.

In preparing to write this history, I interviewed at length a number of former Department Chairs (Henry Torrey, Peter Weiss, and Harold Zapolsky), faculty Colleagues (Richard Weidner, Herman Carr, Peter Lindenfeld, George Horton and Richard Plano) and a physics graduate student from before World War II (George Downsborough). I am also grateful to many others who provided information that was helpful in writing this history.

I acknowledge the help of University Archivist Thomas Frusciano and his colleagues at Alexander Library. The University histories of William Demarest and Richard McCormick were excellent resources for the early history. A number of other books were also useful for the early part of this history. The University Archives provided access to early records, including minutes of the Board of Trustees, college catalogs, and other records. My own files and the Department files have been an important source of information for the more recent history. These files have provided access to annual reports, proposals, plans, and other reports. The published material used in the preparation of this history is fairly carefully documented. The unpublished material, interviews, and other sources of input are listed but not documented in as much detail.

I am grateful to my colleagues who read this manuscript and offered helpful suggestions. These colleagues include Paul Leath, Noémie Koller, George Horton, Peter Lindenfeld, Herman Carr, Richard Plano, and Harold Zapolsky. I acknowledge the helpful suggestions provided by University Historian Richard McCormick and my daughter, Catherine Robbins. Ann Hughes at Gateway Press has guided me in the preparation of the manuscript for publication. I give special thanks to my wife, Alice Robbins, who has read and reread the manuscript, and who has provided ongoing support and encouragement.