



26 November 2008

David W. Pershing
Senior Vice President for Academic Affairs
205 Park
Campus

Dear Vice President Pershing:

At its meeting of 24 November 2008, the Graduate Council voted to approve a proposal to change the name of the Department of Physics to the Department of Physics and Astronomy within the College of Science.

As a result of the 1998 Graduate Council Review, the Physics Department established a long-term goal of expanding its successful astrophysics research program into a traditional astronomy program.

The proposed name change will more accurately represent reflect the basic science teaching and research that occurs within the department, and will enhance recruitment of undergraduate and graduate students who may be interested in research in astronomy and astrophysics.

A copy of the proposal is attached for your approval and transmittal to the Academic Senate.

Sincerely,

Frederick Rhodewalt
Acting Dean

A PROPOSAL TO CHANGE THE NAME OF
THE DEPARTMENT OF PHYSICS
TO
THE DEPARTMENT OF PHYSICS & ASTRONOMY

October 23, 2008

1. Request

In seeking to more accurately reflect the nature of the research and teaching that occurs in our department, we are requesting to change the name of the department from the “Department of Physics” to the “Department of Physics and Astronomy.”

Background Information about the Department of Physics

The Department of Physics at the University of Utah has strong, internationally recognized research and teaching programs oriented around two major strengths: Solid State Physics and Astrophysics. The Department of Physics offers B.S. and B.A. major degrees in Physics and Applied Physics, as well as a minor in Physics and a minor in Astronomy. At the graduate level, the Department of Physics offers M.S. degrees in Physics, Computational Physics, and Instrumentation, as well as PhD degrees in Physics, Medical Physics, and Chemical Physics. There are approximately 230 undergraduate majors and 90 graduate students currently enrolled in the department. The faculty currently consists of 30 full-time, tenured or tenure-track professors (17 Professors, 8 Associate Professors, 5 Assistant Professors), plus 10 Research Professors, four Lecturer Professors, and 15 postdoctoral Research Associates. The degree programs within the department are fully accredited.

2. Rationale for Name Change

As a result of the 1998 Graduate Council Review, the Physics Department established a long-term goal of expanding its successful astrophysics research program into a traditional astronomy program. This process was given a ‘kick-start’ in May 2000 with the awarding of an external grant from the Willard L. Eccles Foundation to develop upper level courses in observational astronomy, stellar astrophysics, and cosmology. The Eccles grant funded the development of a student astronomical observatory on top of the South Physics building on campus. In May 2006, this process culminated in the development and approval of the new minor degree in Astronomy.

During this same month, the Willard L. Eccles Foundation awarded a second grant to the Physics department for a new Astronomical Observatory, to be located at a high altitude in Southern Utah. This new project provided strong momentum for the long-term goal of creating the astronomy program within the Physics department, called the ‘Astronomy

Initiative'. As part of the initiative, the University of Utah approved hiring of up to six new tenure-track astronomy faculty members within the Physics Department. As of the date of this proposal (October 2008) two new faculty members have been hired (Kyle Dawson and Frank van den Bosch); these faculty members will arrive on campus in early 2009. We have also extended an offer for a tenured position to a world-class quantum cosmologist (Laura Mersini, University of North Carolina –Chapel Hill). We await hearing news of her acceptance of the offer by the end of 2008. In addition, the Physics department was recently approved to search for the next two faculty members in astronomy during the 2008-2009 academic year. During the next four years, the Department of Physics will complete the hiring of all six astronomy faculty members, and will develop a B.A./B.S. degree in astronomy as well as a full graduate program in astronomy.

The Physics Department has made exceptional progress in building up the necessary research resources and facilities to create a full astronomy program at the University of Utah. In 2007, we received a generous grant from the E.W. Dumke and K. W. Dumke Foundation to establish public education and outreach facilities associated with the new astronomy program and the Southern Utah Observatory. In April 2008, we received a matching grant from the Willard L. Eccles Foundation to enable the University of Utah to become a Full Institutional member of the Third Digital Sky Survey (SDSS-III). SDSS-III is an international collaboration of Universities and research institutions aimed at mapping a large fraction of the Universe in search of a deeper understanding of the cosmological forces involved in the creation and expansion of the universe, in understanding the forces involved in galaxy formation and evolution, and in substantially expanding the catalog of the galaxy's extra-solar planets. The University of Utah is now a major partner in this international astronomy research program, alongside with Princeton University, University of California-Berkley, University of Arizona and Johns Hopkins University.

In summer 2007, we also began construction of a third astronomy project; a pair of twin 3-meter (10 foot) diameter optical telescopes located near Grantsville, Utah. This new facility, called *StarBase-Utah* is located 35 minutes from the Salt Lake City airport. *StarBase-Utah* will be used as a testbed facility for development of new techniques in optical astronomy, with an emphasis on the Intensity Interferometry technique for measuring stellar diameters of stars. The *StarBase-Utah* telescopes are nearing completion this fall; in the mean time they have already been used for public education and outreach activities in astronomy for residents of Grantsville and Salt Lake City.

The primary rationale for this proposed name change is to more accurately represent of research, teaching, and educational outreach activities that take place within the department. Specifically, we are now offering new research, courses, and public outreach activities related to traditional astronomy, as well as establishing the new optical research telescopes on campus, in southern Utah, and at *StarBase-Utah*. Several times per month, astrophysics and astronomy faculty members from the Department of Physics are sought out by journal, newspaper and television reporters for quotes and opinions regarding astronomical phenomena and research, but their institution is listed as the "University of

Utah Department of Physics". It has become apparent that the current name, "Department of Physics", is confusing to the external public as many times per month we are asked for the phone number of the Astronomy department; the general public does not automatically associate the 'Department of Physics' with the 'Department of Astronomy'. We believe that changing the department name to the 'Department of Physics and Astronomy' will more accurately reflect the basic science teaching and research that occurs within the department, and will serve to lessen confusion to the general public and to incoming students. In addition, we believe that this more appropriate description of our activities will also enhance our abilities to recruit more undergraduate and graduate students who may be interested in research in astronomy and astrophysics.

3. Departmental Names at Other Institutions

For departments offering substantial research and teaching programs in astronomy, there are three different naming options:

- 1) Employ the name "Department of Physics"
- 2) Employ the name "Department of Physics and Astronomy"
- 3) Develop a separate "Department of Astronomy" which is independent from the "Department of Physics."

A survey of the 2004 American Institute of Physics (AIP) guide to Programs in Physics and Astronomy reveals that there are approximately 95 departments across the United States that have a strong research component in astronomy and/or astrophysics. Of these 95 departments, 52 are listed as the "Department of Physics and Astronomy," whereas 22 are listed as a separate "Department of Astronomy." Only 24 of the 95 departments with a strong astronomy research program are listed as "Department of Physics."

Consequently, the name "Department of Physics and Astronomy" is the most appropriate title for the research and degree programs offered at the University of Utah. The term "Department of Physics" is used only by a small minority of programs across the country, and is therefore generally misleading to the general public, students, funding agencies as well as peer institutions.

4. Changes in Degree Names

This proposal does not seek to change the official degree names currently offered by the Physics department. Changes in degree names should be considered after a full proposal for the establishment of the B.S./B.A. undergraduate degree program in Astronomy has been developed and proposed, in conjunction with the development of the full graduate program in Astronomy. This degree program will be developed over the next two years, after the new astronomy faculty arrive on campus, and will be the subject of a future proposal to the University of Utah. We anticipate starting the formal process for approval of the undergraduate and graduate astronomy degree program in the 2009-2010 academic year.

5. Changes, if any, in catalog prefix descriptions, course designations, etc.

The University of Utah Course Catalog refers to courses in the Department of Physics using the acronym "PHYS". Since 2004, the Physics department has been offering astronomy coursework under this acronym, and has also been cross listing this courses under the acronym 'ASTR'. The proposed change of the department name to the 'Department of Physics and Astronomy' would not change any of the catalog prefix descriptions. It will solve existing confusion students have had searching for 'ASTR' courses descriptions under a non-existent 'Department of Astronomy' program.

6. Other Matters

Uniqueness of Degree Program on Campus and Statewide

The proposed name change does not conflict with the mission of any other degree program or research program at the University of Utah. It will encompass all existing University of Utah astronomy and astrophysics teaching and research activities on campus; there is no possibility for confusion between this departmental name and the teaching and/or research goals of any other department, college, or program on campus. Statewide, the new department name will draw attention to the first (and only) public university astronomy program in the state of Utah. The only other existing "Department of Physics and Astronomy" in Utah is at BYU; this program combines an undergraduate studies program in astronomy (with an emphasis on secondary school teaching) with faculty-lead research in astronomy.

Cost Change/Administrative Structure

There are no substantive costs associated with making the proposed name change. The hiring of the additional astronomy faculty members has been approved independent of this name change. Items such as departmental letterhead, business cards, etc. will eventually need to be replaced with the new name. We intend to use up the existing stock of such items, and reorders of these materials will incorporate the new departmental name. The change of name on such materials will therefore occur on a 'as needed' basis and will therefore not engender additional costs. Our departmental administrative structure will not change, nor will the department's status within the College of Science be affected.

Benefits of Name Change

The proposed name change will more accurately reflect the nature of our departmental research, teaching, and outreach mission. The more accurate description will enhance student interest in science and technology through increased awareness of the depth and breadth of research and degree programs offered at the University of Utah. It will provide additional options for undergraduate degrees in science that are more attractive to a wider, more diverse range of the student body than a traditional physics degree program.

The proposed change in the departmental name will enhance our ability to attract future graduate students and faculty with interests in astronomy and astrophysics. The name change will improve the national reputation and ranking of the department, and it will be beneficial to faculty members who wish to submit proposals to the National Science Foundation Division of Astronomy. The ability of the department to submit research proposals to the NSF Division of Astronomy will open up additional channels for funding and collaboration that have traditionally been unavailable to the Physics Department.

7. Contact Information

Physics and Astronomy Program:

Prof. David Kieda, Chair, Department of Physics (581-3538)
Prof. Paolo Gondolo, Director, Astronomy Initiative (581-7788)

Utah Astronomical Observatories:

Prof. R. Wayne Springer, Director, Southern Utah Observatory (585-1390)
Prof. Stephan LeBohec, Director, *StarBase-Utah* (587-9923)

College, School or Division in which Program/Administrative Unit will be located
College of Science

Department(s) or Area(s) in which Program/Administrative Unit will be located
**Department of Physics and Astronomy
(renamed from Department of Physics)**

Program/Administrative Unit Title: **Department of Physics and Astronomy
(renamed from Department of Physics)**


Certificate, Diploma and/or Degree(s) to be awarded: **All Degrees currently
offered under Department of Physics**

Proposed Beginning Date: **March 1, 2009**

Institutional Signatures (as appropriate):



David B. Kieda, Chair, Department of Physics



Pierre V. Sokolsky, Dean, College of Science

Career and Technical Education Director

David Chapman, Dean, Graduate School

David W. Pershing, Senior VP for Faculty

Michael K. Young, President

Date



November 12, 2008

Dr. Fred Rhodewalt
Acting Dean
The Graduate School
302 Park
CAMPUS

Dear Fred:

I strongly support and endorse the proposed name change from the Department of Physics to the Department of Physics and Astronomy requested by the Physics faculty. Four years ago, the department decided on developing a strong emphasis on Astronomy and has succeeded in getting the central administration's approval for five new lines in this discipline. They have also been successful in raising private money for a new research grade telescope, to be built in central Utah, and participation in the Sloan Digital Sky Survey, an internationally renowned program in Astronomy. Two new faculty members have already been hired and the search is continuing this year. The department is, in my opinion, ready to move academically from a minor in Astronomy to a major, and to begin work on graduate programs in this area. This emphasis complements and extends the long established pre-eminence of cosmic ray and particle astrophysics programs in the department.

Changing the name of the department reflects this new emphasis and will make them more visible in this community as well as making it easier for interested students to identify the existence of the program at the university.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Sokolsky', written over a horizontal line.

Pierre V. Sokolsky
Dean, College of Science, and
Professor of Physics