DEPARTMENT OF PHYSICS & ASTRONOMY UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Guidelines on Authorship and Authorship Dispute Resolution

Approved by Department on March 2, 2018; Department Chair: Christian Iliadis.

I. Introduction

This document provides guidelines for authorship of publications for research carried out within the Department of Physics & Astronomy. It also defines procedures for the resolution of authorship disputes.

II. Authorship Guidelines

All individuals or groups in the department, independent of size, should follow the co-authorship guidelines of the American Physical Society (APS), posted at:

http://www.aps.org/policy/statements/02_2.cfm

The main features are characterized by the excerpts below.

- (i) "Authorship should be limited to those who have made a significant contribution to the concept, design, execution or interpretation of the research study. All those who have made significant contributions should be offered the opportunity to be listed as authors. Other individuals who have contributed to the study should be acknowledged, but not identified as authors."
- (ii) "All collaborators share some degree of responsibility for any paper they coauthor. Some coauthors have responsibility for the entire paper as an accurate, verifiable, report of the research. These include, for example, coauthors who are accountable for the integrity of the critical data reported in the paper, carry out the analysis, write the manuscript, present major findings at conferences, or provide scientific leadership for junior colleagues."
- (iii) "Coauthors who make specific, limited, contributions to a paper are responsible for them, but may have only limited responsibility for other results. While not all coauthors may be familiar with all aspects of the research presented in their paper, all collaborations should have in place an appropriate process for reviewing and ensuring the accuracy and validity of the reported results, and all coauthors should be aware of this process."
- (iv) "Every coauthor should have the opportunity to review the manuscript before its submission. All coauthors have an obligation to provide prompt retractions or correction of errors in published works. Any individual unwilling or unable to accept appropriate responsibility for a paper should not be a coauthor."

There are several features of these guidelines that have important practical implications when applying them in the research environment of our department:

(a) Co-authorship requires active participation in the research. That is, co-authorship is not an

entitlement of passive contributions. Some examples of passive contributions are assignment of students or postdocs to a project without active supervision of their work in the project, loan of routinely used equipment or materials, or serving as a PI or co-PI of a grant, while not directly engaged in the research.

- (b) Determining what is considered "significant" contributions requires judgment.
- (c) Specialization must be considered when deciding on issues of co-authorship. For complex physics projects, co-authorship does not require participation in all aspects of the project. For example, theorist collaborations on a paper reporting new measurements are not required to validate the correctness of the experimental techniques. Likewise, the experimentalists are not expected to verify the theoretical calculations.

III. Implementation of Authorship Guidelines

This section provides guidance on issues of authorship that can be generally applied by collaborations composed mostly of researchers from our department. These guidelines are not intended to override the authorship rules of external collaborations and make no attempt to account for every conceivable scenario. All scientific collaborations have the option to develop their own authorship guidelines. If a collaboration chooses this route, it is expected to submit a copy to the department chair to keep on file.

Guidance and considerations:

- (i) Establish the rules for co-authorship early in organizing the collaborative research or collaboration. This step should be explicit and done independent of the size of the collaboration. Disputes often involve only two people. Co-authorship agreements should include who will make the judgment of what constitutes significant contributions. It is easier at the beginning of the project to lose a collaborator who has no intention of contributing at the expected level for co-authorship than to resolve a conflict after the research is nearly completed.
- (ii) Within a collaboration, the lead scientists on a project are likely candidates for deciding or arbitrating issues regarding authorship of manuscripts. The lead scientists are those who have oversight responsibility for the entire work reported in the manuscript. It is appropriate and expected that students will provide input to the lead scientists on authorship. This consideration is particularly important when a student participates in a project that constitutes a significant part of the student's thesis work. In these cases it is expected that the student will consult with the dissertation adviser and/or lead scientists on the project.

IV. Authorship Dispute Resolution

- (i) Initial attempts to resolve authorship disputes should be attempted within the research group and/or collaboration. These discussions should include senior scientists on the project. One of the associate chairs of our department may be asked to participate or serve as mediator in such discussions.
- (ii) If a dispute cannot be resolved within the research group or collaboration, the senior scientists are expected to notify the department chair. The department chair will form an Authorship Conflict Resolution Committee, composed of faculty who are not members of the research group or collaboration, to investigate the report. The investigation may include interviews with the disputing parties and other people relevant to the dispute. Once information is gathered, the Authorship Conflict

Resolution Committee will call a meeting with the disputing parties with the goal of resolving the conflict. Following the meeting, the committee will issue its recommendations to the full collaboration and to the chair of the department.

(iii) If the parties are unwilling to accept the recommendations of the Authorship Conflict Resolution Committee, they may choose to pursue the matter further following university policies on disputes in research. The committee will also decide if funding agencies need to be notified of the dispute.