

Resolution 45: Continuation of PHYS 4500: Cultivating Public Engagement in Physics

Abstract: Urging Cornell to continue funding for PHYS 4500.

Sponsored by: Constance Newell'24, Free Science Inc., Society of Physics Students, Cornell Astronomical Society

Reviewed by: Academic Policy, 05/02/2023 (4-0-3)

Type of Action: Recommendation

Originally Presented: 05/04/2023

Current Status: New Business

Whereas, the Free Science Workshop is a nonprofit organization based in Ithaca, NY that provides a supportive, community-based space for low-income and under-represented youth to explore the world and expand their capabilities through science and creativity. ¹

Whereas, the Physics Bus is a branch of the Free Science Workshop and is a mobile exhibition of upcycled appliances exploring physics phenomena, with the mission to awaken interests in physics for all ages and walks of life- especially those underserved by science enrichment.

Whereas, the Ithaca Physics Bus reaches a wide range of people in diverse locations from local neighborhoods, urban parks and rural schools, to cross-country destinations.

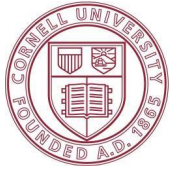
Whereas, the Ithaca Physics Bus not only serves as a pillar for the Ithaca community, but also as a role model for community engaged learning throughout the U.S.

Whereas, in 2018 the Einhorn Center for Community Engagement awarded \$40,000 per year for the establishment of PHYS 4500: Cultivating Public Engagement in Physics, as a collaboration effort between Cornell and the Ithaca Physics Bus.

Whereas, PHYS 4500 is a non-traditional class that engages in physics learning through exhibit building.

Whereas, PHYS 4500 provides a unique hands on learning opportunity for Cornell students of all majors and backgrounds.

¹ <https://freescienceworkshop.org/>



Cornell University Student Assembly

Whereas, a study published by the American Physical Society showed that students who participated in informal physics programs positively developed their identities as students, experienced increased sense of belonging to the science community, and developed 21st century career skills. ²

Whereas, a study published by the Department of Education showed that a hands-on-approach to learning improved academic performance and long-term engagement with content. ³

Whereas, a similar course has been successfully implemented by Colorado State University, NSCI 170 Perspectives and Communication in Science, in partnership with the Little Shop of Physics.

Whereas, the Little Shop of Physics is a hands-on STEM outreach program and a collaborator of the Ithaca Free Science Workshop.

Whereas, funding for PHYS 4500 ends Spring 2023 semester.

Whereas, PHYS 4500 is not being offered for the Fall 2023 semester.

Whereas, at least 20 students have expressed interest in this class.

Whereas, as a large and influential institution, Cornell has a social responsibility to engage with and contribute to the local community.

Whereas, PHYS 4500 is a way for Cornell to build a positive relationship with the surrounding community while promoting engaged learning on campus.

Be it therefore resolved, Cornell University continues to offer PHYS 4500 with Erik Herman, Physics Bus Founder, as lecturer.

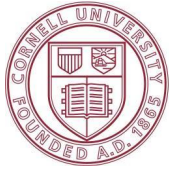
Be it further resolved, Cornell University provides the necessary funding of \$2,500 per semester to cover the cost of supplies, travel, and outreach activities.

Be it further resolved, Cornell University compensates Erik Herman appropriately for his work.

Be it finally resolved, Cornell University continues its positive relationship with the Ithaca community through PHYS 4500.

² <https://journals.aps.org/prper/pdf/10.1103/PhysRevPhysEducRes.17.020110>

³ <https://files.eric.ed.gov/fulltext/EJ1086006.pdf>



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Student Assembly

Respectfully Submitted,

Constance Newell '24

College of Agriculture and Life Sciences Representative, Student Assembly

Lori Tenenbaum

Executive Director, Free Science, Inc. & Acting Director, The Global Alliance of Community Science Workshops

Olivia R. Vincent

Program Director: Free Science Inc./ Physics Bus. National Geographic Certified Educator

Annika Deutsch '24

Physics Major and UTA, Mathematics Major & President, Cornell Astronomical Society

Colin Murphy

College of Arts and Sciences, Physics Major & President, Society of Physics Students

Ethan Alarcon '23

College of Arts and Sciences Astronomy Major

Haonan Gong

College of Arts and Sciences, Astrophysics Major

Abra Geiger

College of Arts and Sciences, Physics Major & Women in Physics Chair, Society of Physics Students

Lucas Lawrence

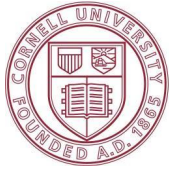
College of Arts and Sciences, Physics Major & Physics UTA

Ariel Marxena Baksh

College of Arts and Sciences, Physics Major & Senior Advisor, Society of Physics Students

Connor Stroth '25

College of Arts and Sciences, Physics Major & Treasurer, Society of Physics Students



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Student Assembly

Justine Singleton

College of Arts and Sciences, Astronomy Major & Events Director, Society of Physics Students

L.M. Nawrocki '23

College of Engineering, Mechanical Engineering

Abigail Bohl

College of Arts and Sciences, Physics Major & Social Media Chair, Society of Physics Students

Anirudh Sharma

College of Arts and Sciences, Physics and Biology Major

Julianna Lee

College of Agriculture and Life Sciences, Agricultural Sciences Major

Audrey Lyons '25

College of Arts and Sciences, Psychology Major

Laine Havens '25

*College of Arts and Sciences, Astronomy Major and Science and Technology Studies Major,
Physics UTA*

Unaizah Alam '23

Applied & Engineering Physics, College of Engineering

Aditya Manthri '24

College of Arts and Sciences, Computer Science and Astronomy

Hodaya Propp '23

Applied & Engineering Physics, College of Engineering

Livia Kong

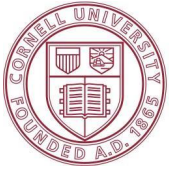
College of Engineering, Engineering Physics Major & Wiki Chair, Society of Physics Students

Mary Yuan '26

Physics UTA, College of Engineering

Marcel Latasa

Physics UTA, College of Engineering



Cornell University
Student Assembly

Alexander Flood '23

College of Arts & Sciences, Physics Major and UTA