

JOIN US

Thursday, October 10, 2019

Results of the Physics and Astronomy New Faculty Workshops

2 p.m. 109 Bessey Hall | DBER Seminar

For the past 23 years, the American Association of Physics Teachers, the American Physical Society and the American Astronomical Society have organized and run a series of Physics and Astronomy New Faculty Workshops (NFWs). The goal of the NFWs is to provide productive ways for early career faculty to enhance student learning and attitudes through interactive engagement pedagogies. Since their inception, the workshops have served over 2,500 participants and currently reach about 40% of the all tenure-track hires in physics and astronomy in the U.S. The series has also expanded to include non-tenure track faculty in the NFWs, workshops for experienced faculty and for faculty at HBCUs. Based on feedback, the NFWs have evolved considerably over the years. In this talk, I will review what has been learned and the impact on higher education physics teaching and learning, including comparisons with similar workshops in chemistry, mathematics, the life sciences, and the earth sciences.

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Bringing Physics Back to Life

4 p.m. (Coffee at 3:30 p.m.)

136 Jorgensen Hall | Physics and
Astronomy/Biology Colloquium

In many colleges and universities, the introductory physics course for students majoring in the life sciences (including the health sciences) constitutes the largest (or one of the largest) service courses that physics departments offer. Developing a physics course that explicitly serves the needs of those students is challenging because of the wide variety of professional interests of life science and health science students and because most physics faculty have little background in applying physics to those areas. The Living Physics Portal project was started in 2017 to establish a vetted and curated online set of resources for faculty teaching such courses. In this talk I will provide several examples from the Portal of “authentic” applications of physics to problems in the life and health sciences. Here, authentic means that the physics leads to a deeper understanding of the processes and properties of living systems. I will also provide a brief survey of the Living Physics Portal (www.livingphysicsportal.org) resources and how faculty can contribute to the collection of resources.

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WELCOMES



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