The Physics Department of the University of Wisconsin-Madison

Physics Education Innovation Seminar

Tim Stelzer, University of Illinois at Urbana-Champaign

Online Activities to Improve In Person Learning

Students' unprecedented access to content on the web is providing a unique opportunity to transform the role lectures in education, moving the focus from content delivery to helping students synthesize the content into knowledge. We have introduced a variety of activities to facilitate this transformation at the University of Illinois, including web-based preflight assessments of student understanding before lecture, peer instruction (clickers) to assess and facilitate student understanding during lecture, and web-based multimedia pre-lectures designed to provide students with content before lecture. In this talk I will discuss the pedagogical motivation for introducing these activities, and the impact they have had at the University of Illinois



Professor Timothy Stelzer received his bachelor's degree in physics from St. John's University in 1988, and his Ph.D. in physics from the University of Wisconsin-Madison in 1993. A high-energy particle theorist, Professor Stelzer has concentrated on standard model physics at hadron colliders. He has also been heavily involved with the Physics Education Group at Illinois, where he has led the development and implementation of tools for assessing the effectiveness of educational innovations in introductory courses and expanding the use of web technology in physics pedagogy. He was instrumental in the development of the I-clicker™ and is a regular on the University's "Incomplete List of Teachers Ranked as Excellent by Their Students." He and collaborators were selected by the American Physical Society to receive the 2013 Excellence in Education Award in recognition of their creation of smartPhysics, a web-based learning environment. He also received the UW Department of Physics' Distinguished Alumni Award in May 2015.



Monday, December 7, 2015
12:00 noon | 4274 Chamberlin Hall