Are you really teaching if no one is learning?: How interactive lecturing can be used to measure and improve student learning

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Friday, May 22
2–5 p.m.
Room 50 Milton Hall

The goal of this workshop is to help participants to implement interactive learning strategies into the lecture portion of their classrooms. From questioning in the classroom to small group collaborative activities, interactive teaching will be modeled by both workshop leaders and participants. Active audience participation will be required—no, really, it will be fun, really!!

Members of the Center for Astronomy Education (CAE) at the University of Arizona have been developing and conducting research on the effectiveness of learner-centered instructional strategies and materials that put students in an active role in the traditional lecture classroom. The results of this work have been incorporated into a series of “Teaching Excellence Workshops” that members of CAE have been conducting around the nation as part of the NASA Spitzer Education and Public Outreach Program, JPL Navigator/Exoplanet-Exploration Public Engagement Program and the NSF CCLI Phase III Collaboration of Astronomy Teaching Scholars (CATS) Program. The goal of these workshops is to improve participants’ implementation and pedagogical content knowledge of research-validated interactive learning strategies.

Edward E. Prather, Ph.D., is an Associate Staff Scientist with Steward Observatory and Senior Lecturer in the Department of Astronomy at the University of Arizona. In 1995 he earned a B.S. in physics and astronomy at the University of Washington and in 2000 earned his Ph.D in physics from the University of Maine. Since 2004 he has served as Executive Director of the NASA and NSF-funded Center for Astronomy Education (CAE) at the University of Arizona. CAE has created a national collaboration of Astronomy faculty, post-docs, graduate and undergrad students who are actively engaged in conducting fundamental research on core issues related to the teaching and learning of Astro-101 and other STEM topics.