Benemérita Universidad Autónoma de Puebla

La Facultad de Ciencias Físico Matemáticas Cuerpo Académico: Investigación Educativa

XII Taller Internacional Nuevas Tendencias en la Enseñanza de la Física

la reunión de los que quieren que sus estudiantes mejoren su aprendizaje de física

Mini-Course on Physics Education Research and Research-Based Innovations in Physics Instruction

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Part III: Research-Based Active-Learning Instructional Methods in Large-Enrollment Physics Classes

Sunday, May 30 (10:45 AM – 12:15 PM)

A long-standing challenge has been to incorporate active-learning instructional methods in large-enrollment physics classes traditionally taught in a lecture format. I will describe the methods we have introduced to develop a "fully interactive physics lecture," and discuss the curricular materials that we have created to support this form of instruction. This involves both carefully designed sequences of multiple-choice conceptual questions, and free-response worksheets designed to be used by students working in collaborative groups.