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 I: Physics Education Research: Laying the Basis for Improved Physics Instruction

Friday, May 28 (10:45 AM – 12:15 PM)

Over the past 20 years, systematic investigations have helped to clarify the dynamics of students' thinking during the process of learning physics. This research has revealed students' learning difficulties, as well as aiding in the development of more effective instructional strategies. I will describe the principal goals and methods of Physics Education Research, and discuss some of the methodological issues related to this work. With examples drawn from investigations we have carried out at Iowa State University, I will illustrate this research process and show how it can lead to improved curricula and instructional methods.