Session BH: Methods of Teacher Evaluation

Location: Room 104B

Sponsor: Committee on Teacher Preparation **Co-Sponsor:** Committee on Physics in High Schools

Date: Monday, Feb. 6 **Time:** 12:45–2:05 p.m.

Presider: Monica Plisch

Teacher evaluation has been a hot topic in the national news. Physics, with a relatively long history of discipline-based education research, is in a position to contribute to the national discussion.

BH01: 12:45-1:15 p.m. Evaluation of Teachers, or of Teaching, for Improving Learning Outcomes

Invited – David E. Meltzer, Arizona State University, Mary Lou Fulton Teachers College, Mesa, AZ 85212; david.meltzer@asu.edu

Many studies have been done to evaluate effectiveness of physics instruction, e.g.: How well do students learn physics concepts, problem-solving skills, or scientific process skills, or develop expert-like attitudes? The wide range of studies reflects the diversity of teaching goals. The clear result from decades of research is that the most important factor in effective instruction is the nature of the instructional methods and curricular materials. The same instructor can get very good, very bad, or very average outcomes from the same group of students, depending on the goals and the methods and materials employed. Other research has demonstrated that the same instructor using the same materials may obtain very different outcomes depending on the background and preparation of the students. I will argue that attempts to adduce "instructor-dependent" effects that are independent of methods, materials, and students, are largely spurious, impractical, and obstructive of effecting genuine improvements in instruction.

