

Workshop Title:

Cognitive research and the practical classroom: Bridging the gap

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Abstract:

In the past few decades, studies in cognitive psychology have advanced our understanding of how people think and learn. Unfortunately, the link between such research and classroom practice is often unclear. In this workshop, participants will examine a few key findings from cognitive studies and discuss practical implementations of those findings in the physics classroom. Topics will include student expectations and beliefs about learning physics, cognitive conflict and conceptual change theory, and learning as an active, constructive process. A list of resources for research-based instructional materials will be provided and strategies for using them to teach physics will also be addressed.