

MAS14-2014-000025

Abstract for an Invited Paper
for the MAS14 Meeting of
the American Physical Society

Improving student understanding of physics through research

CHANDRALEKHA SINGH, University of Pittsburgh

Despite our best and most sincere efforts, there is an alarming disconnect between what we teach and what students learn and understand. The goal of physics education research is to help close this gap. I will discuss, using my own research and activities as examples, some important components of physics education research. My own research has emphasized student understanding of introductory and advanced concepts. We are working on developing and evaluating strategies that actively engage students in the learning process. I will summarize some of the findings.