

Abstract Submitted  
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**Correlating students' beliefs about physics with learning, retention, and recruitment**<sup>1</sup> KATHERINE K. PERKINS, WENDY K. ADAMS, MINDY GRATNY, STEVEN J. POLLOCK, CARL E. WIEMAN, University of Colorado at Boulder — We have developed and used a new survey instrument – the Colorado Learning Attitudes about Science Survey (CLASS)<sup>1</sup>– to extensively study the importance of students' beliefs about physics and about learning physics to physics education. Since Fall 2003, we have surveyed over 10000 students in 50 physics courses ranging from courses for non-science majors to graduate courses in physics. In this talk, we will present the important, and sometimes surprising, results emerging from this study regarding the relationships between students' beliefs about physics and learning physics and: their conceptual learning, their interest in and pursuit of science study, and classroom teaching practices<sup>2</sup>. 1. W.K. Adams, K.K. Perkins, N. Podolefsky, M. Dubson, N.D. Finkelstein and C.E. Wieman, “A new instrument for measuring student beliefs about physics and learning physics: the Colorado Learning Attitudes about Science Survey”, Phys. Rev ST: Phys. Educ. Res. 2, 1, 010101 (2006). 2. See <http://per.colorado.edu> for relevant papers.

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