

NES15-2015-000071

Abstract for an Invited Paper  
for the NES15 Meeting of  
the American Physical Society

**Flat space, deep learning**

ERIC MAZUR, Harvard University

The teaching of physics to engineering students has remained stagnant for close to a century. In this novel team-based, project-based approach, we break the mold by giving students ownership of their learning. This new course has no standard lectures or exams, yet students' conceptual gains are significantly greater than those obtained in traditional courses. The course blends six best practices to deliver a learning experience that helps students develop important skills, including communication, estimation, problem solving, and team skills, in addition to a solid conceptual understanding of physics. This showcase will discuss the course philosophy and pedagogical approach and participants will take part in a new form of collaborative assessment.