Graduate Core Courses in Physics: A Missed Learning Opportunity? ALEXANDRU MARIES, University of Cincinnati, CHRISTOPHER PORTER, Ohio State University, CHANDRALEKHA SINGH, University of Pittsburgh — One major goal of the physics graduate core courses is to help graduate students develop functional understanding of core physics content so that they can apply them flexibly in their research. Since there are various costs to graduate students (opportunity cost and effort, among others) associated with enrollment in these core courses, it is important to think carefully about what the physics “core” really means in the 21st century, what the goals of these courses should be and the extent to which these goals are currently being met at various institutions. In this workshop, participants will discuss these issues pertaining to the graduate core courses as well as typical assessments being carried out in these courses to ensure that the goals are achieved. The participants will generate a working list of common goals for core courses, and consider the extent to which assessment and instruction are aligned with those goals. Participants will also learn about promising approaches to improve graduate student learning outcomes being implemented at various institutions, both through presentations and through a mock group work session. They will also brainstorm about how they can improve teaching and learning in physics graduate core courses at their own institutions given their own institutional constraints.

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