

1125-F1-2786 **Brian J Lindaman*** (blindaman@csuchico.edu), Dept. of Math and Statistics, CSU Chico, 400 W. 1st St., Chico, CA 95929. *Planets, Earthquakes, and Airbags: The Challenge of Incorporating Significant Mathematics Content in STEM Activities.*

The mathematics in a STEM lesson can be underwhelming at times; it can be of minimal importance, too advanced to be applicable, or too shallow to inspire curiosity about the math itself. A grant-funded project in Northern California designed a series of STEM-integrated activities which foster the learning and use of rich mathematics. We found STEM to be an enticing entry point for students; by focusing on real-world STEM scenarios, such as planetary exploration, earthquake activity, and auto collisions, students were motivated to investigate the math deeper. In addition, they were better able to understand the science, engineering, and technology aspects, and their overall curiosity about STEM-integrated problems increased. We are excited to share our activities with others and engage in the important conversation on seeking more ways to promote robust mathematics learning within a larger STEM context. Session participants will receive an overview of how the activities were developed, the activities themselves, and results of their use in precalculus courses. The session will end by sharing the challenges encountered when developing math-intensive STEM classroom activities, and open the conversation to identify ways to collect and share this type of knowledge. (Received September 20, 2016)