A CASPER STEM Oriented Educational Intervention based on Microgravity using a 1.5 sec Drop Tower\textsuperscript{1} JORGE CARMONA, LI WANG, RACHEL MOORE, CASPER - Baylor University, JUDY YORK, Region 12 Service Center, TODD BUCHS, MARIE CLYATT, Baylor University, RENE LAUFER, LORIN MATTHEWS, TRUELL HYDE, CASPER - Baylor University — The CASPER educational research group strives to contribute to the effort of increasing students’ interest in and preparation for STEM careers by cultivating partnerships between educators, industry, and state educational institutions while applying the latest innovations and available tools to curriculum development. To this end, CASPER has brought together a group of educational researchers and curriculum designers to produce the CASPER Microgravity Investigators educational intervention, which is coordinated to the 21\textsuperscript{st} Century Learning framework. Material for this educational intervention is based on a newly constructed 1.5 s drop tower at Baylor University and operated by the Center. In this presentation we present the details of the intervention as well as the physics and STEM material which are incorporated into microgravity experiments.

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