

Seminar

A Solar System learning progression: evaluation of the gravity and dynamical properties dimensions



Julia Plummer,

Associate Professor of Science Education al PennState College of Education

Martedì 29 Maggio 2018 ore 16.00 *Dipartimento di Fisica "E. Pancini"* Aula 0M04

Abstract

Learning progressions use evidence from student cognition and teaching experiments to describe how students' understanding of big ideas in science develop in increasing sophistication through instruction. My research group has been evaluating a learning progression we developed which describes progress towards understanding the Solar System, including the role of gravity and orbital motion. We interviewed U.S. students (age 12-13 years) before and after their astronomy unit and analyzed video of instruction. Analysis supports our initial hypothesis for how students' understanding progresses in this domain, but also points to areas where additional research is needed on instruction for gravity and inertia.

Proponente:

Italo Testa italo.testa@unina.it