

## **Workshop ”Investigative Science Learning Environment and student learning of energy” med fika (Fysicum H421), fully booked**

*Friday 17 June 2022 09:01 (2h 59m)*

Eugenia Etkina (Rutgers University, USA) and Gorazd Planinsic (University of Ljubljana, Slovenia)

In this workshop the participants will learn the foundations of the Investigative Science Learning Environment approach (ISLE) to teaching and learning physics and how to use this approach to help students invent the concepts of energy, work, and energy conservation. Specifically, we will focus on the idea of a system and a bar charts as a representation of work-energy processes. The ISLE approach is a scaffolded inquiry approach that helps students learn physics by engaging them in the processes that mirror scientific practice. The students, working in groups, start by observing physical phenomena, identifying patterns, and devising conceptual and quantitative models. Then they design experiments to test the models trying to rule them out. Finally, the students apply the models that were not ruled out by the testing experiments for practical purposes.

**Presenters:** ETKINA, Eugenia; PLANINSIC, Gorazd

**Session Classification:** Undervisningssektionen (Gymnasie)