



GIREP-EPEC

Transforming physics learning via Research & Practice
LEIDEN, 2025

Contribution ID: 188

Type: Symposium

Towards a coherent teaching of energy across ages and disciplines (I)

Tuesday 1 July 2025 13:30 (1h 30m)

This is the first part of a symposium that addresses the complex challenge of teaching energy as a crosscutting concept coherently across disciplines and grade levels. One key issue is the disparate vocabulary and norms each discipline uses to explain energy and the traditional forms-based teaching approach that often compartmentalizes students' understanding. Our discussions will focus on integrating theory with empirical methods, creating a unified language that spans different ages and disciplines, and connecting abstract concepts to everyday experiences. By emphasizing experimental-oriented approaches, the symposium will explore educational advancements and specially designed curricular materials to enhance energy education.

Education level

All ages

Physics topic

Thermodynamics and Energy

Research focus

Other

Research method

Other

Organizing preference criteria

Track

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Session Classification: Symposium

Track Classification: Thermodynamics & Energy (THERMO)