

Contribution ID: 172 Type: Symposium

Symposium: Towards a coherent teaching of energy across ages and disciplines (II) - THERMO

Thursday 3 July 2025 09:00 (1h 30m)

This is the second 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

Authors: Dr LOGMAN, Paul (Leiden University, Leiden Institute of Physics); Prof. LEHAVI, Yaron (The David Yellin Academic College of Education)

Co-authors: DE ANGELIS, Alessandra (Istituto d'arte Sello di Udine, Italy); Dr MERZEL, Avraham (The Hebrew University of Jerusalem, Israel); Prof. KAPER, Wolter (University of Amsterdam)

Presenters: Dr LOGMAN, Paul (Leiden University, Leiden Institute of Physics); Prof. LEHAVI, Yaron (The David Yellin Academic College of Education)

Session Classification: Symposium

Track Classification: Thermodynamics & Energy (THERMO)