



# GIREP-EPEC

Transforming physics learning via Research & Practice  
LEIDEN, 2025

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Type: **Oral presentation**

## ToPLab: sustaining innovation in physics labs through Faculty Learning Communities

*Thursday 3 July 2025 15:30 (20 minutes)*

In 2024, our department launched the ToPLab initiative to implement department-level, sustainable, and evidence-based innovation in teaching labs. The transition from the broader department initiative to course-specific reforms is facilitated by Faculty Learning Communities along with other change strategies. This complex process entails a collaboration between course instructors and physics education researchers. This contribution describes the project structure and its progress in the 2024/25 academic year. Additionally, it presents a core annual course as a case study. Research-based inputs are considered in both course design and project evaluation. The course will be studied in the second semester through direct observation and focus groups.

### Education level

Age over 18 (excluding teacher education)

### Physics topic

Full curriculum

### Research focus

Lab course design

### Research method

Mixed method (qualitative & quantitative)

### Organizing preference criteria

Education level

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**Track Classification:** Laboratory-based physics (LAB)