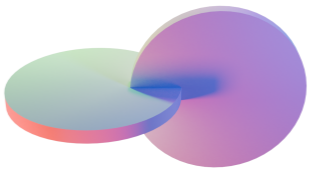

GIREP-EPEC
Transforming physics learning via Research & Practice
LEIDEN, 2025

Contribution ID: **147** Type: **Oral presentation**

Open inquiry in undergraduate lab courses

Tuesday 1 July 2025 16:30 (20 minutes)

Labs can be effective in teaching critical thinking and developing student self-efficacy for empirical science. Open inquiry labs allow students agency in all phases of an inquiry, from defining the research question, testing, refining, and implementing the research methods, and drawing conclusions from results. A team of teachers of diverse undergraduate lab courses won a grant to collaborate in improving their open inquiry teaching methods and to publish open-access course materials and design guidelines to help other lab teachers to adopt open inquiry methods. In our conference contributions we present these practices and guidelines.

Education level

Age over 18 (excluding teacher education)

Physics topic

Full curriculum

Research focus

Lab course design

Research method

Practitioner's Inquiry / Action Research (Qualitative research)

Organizing preference criteria

Research focus

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Presenter: BRADBURY, Forrest (Amsterdam University College)

Session Classification: Parallel oral presentations

Track Classification: Laboratory-based physics (LAB)