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

Contribution ID: **146** Type: **Poster**

Adaptive learning in mechanics using artificial intelligence

Monday 30 June 2025 16:30 (1 hour)

In education, the effectiveness of teaching plays an important role as well as the assessment of the learning process. Teachers are often hopelessly unaware of their students' prior knowledge and skills, and thus of the ideal developmental tasks to solve individually in a given lesson. In this research topic, we aim to create a computer program that can learn which practice task a learner should do to make the most optimal progress based on his or her knowledge and skills.

Education level

Age 15-18 (Secondary education)

Physics topic

Other

Research focus

Artifical Intelligence

Research method

Analytic Physics Education Research (Quantitative research)

Organizing preference criteria

Research focus

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Session Classification: Poster session

Track Classification: Artificial Intelligence (AI)