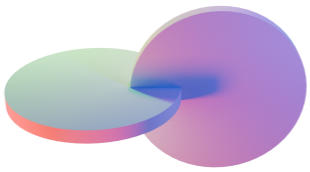

GIREP-EPEC
Transforming physics learning via Research & Practice
LEIDEN, 2025

Contribution ID: **300** Type: **Oral presentation**

Understanding the attention capture of a salient distracting feature in a friction force question

Friday 4 July 2025 14:00 (20 minutes)

Physics problems both found in classroom settings and encountered in real world scenarios can often include extraneous or unnecessary information. If the information is salient, it can capture attention potentially driving the problem solver towards an incorrect solution. To understand the role of such features in physics questions, we have tasked undergraduate students with solving one of three versions of a Newton's laws question in the context of friction. We compare student performance on each of these questions, explaining the findings through the lens of dual-process theories of reasoning.

Education level

Age over 18 (excluding teacher education)

Physics topic

Other

Research focus

Other

Research method

Other

Organizing preference criteria

Author: ROSEN, Drew (University of Edinburgh)

Presenter: ROSEN, Drew (University of Edinburgh)

Session Classification: Parallel oral presentations

Track Classification: Cognitive science research (COGN)