



GIREP-EPEC

Transforming physics learning via Research & Practice
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Type: **Poster**

Modelling Quantum Curriculum Innovation

Monday 30 June 2025 16:30 (1 hour)

In our previous work, we modelled quantum curriculum transformation in five dimensions: 1) content conveyed, 2) skills evoked, 3) level of cognitive ability targeted, 4) representations used and 5) teaching approach employed. We extend this work to practical considerations to model quantum curriculum innovation in contemporary courses and the use and development of digital learning modules. We identify innovative methods that are used in quantum education and main hurdles in the way of innovation.

Education level

Age over 18 (excluding teacher education)

Physics topic

Contemporary and modern physics

Research focus

Innovative instructional strategies and pathways

Research method

Educational design research (Qualitative research)

Organizing preference criteria

Education level

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