Contribution ID: 12 Type: Oral presentation

Seeing Quantum Physics in the Classroom: Navigating the Landscape of Demonstration Material

Wednesday, July 5, 2023 4:40 PM (20 minutes)

We present an overview of demonstration material used in quantum physics education. Our study categorises over 400 articles, covering experiments and demonstrations for quantum education from 1970 to now. Common research questions or goals of studies on demonstration material are identified, together with the number of studies per quantum physics topic. We share insights from studies regarding the use of demonstration materials to teach quantum physics to secondary school and undergraduate students and share considerations reported in these studies. Understanding choices and considerations made in previous studies can contribute to the development of new demonstration materials for quantum physics.

How would you like to present your contribution?

Live in Košice (time slot to be allotted based on the programme)

Target education level (primary)

Upper-secondary education

Target education level (secondary, optional)

University education

Primary author: Mr FOLKERS, Bart (University of Twente)

Co-authors: Prof. BRINKMAN, Alexander (University of Twente); Dr STADERMANN, Kirsten (University of

Twente)

Presenter: Mr FOLKERS, Bart (University of Twente)

Session Classification: Contemporary and modern physics

Track Classification: Contemporary physics and modern physics at school