# Similarities and differences between professions and countries of key-concepts in teaching quantum physics and their illustrations

Tuesday 5 July 2022 13:30 (20 minutes)

This study compares the views of high-school teachers, physics educators at the university level, and physics education researchers from different countries, about the key concepts to be used in teaching quantum physics in secondary education and their illustrations. We analyzed responses to a Delphi study prompted by the QTEdu group, in the attempt to portray the illustrations for each key concept and to map for each illustration, what are the key concepts it involves. This might help in the effort to canonize these concepts for making sound curricula of quantum physics in high-school.

## How would you like to present your contribution?

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

### **Target education level (primary)**

Upper-secondary education

### Target education level (secondary, optional)

University education

#### Author: MERZEL, Avraham (The Hebrew University of Jerusalem)

**Co-authors:** ANDREOTTI, Erica; Dr ANTILLA, Daria (University of Turku); BITZENBAUER, Philipp; BON-DANI, Maria (CNR - Institute for Photonics and Nanotechnologies); CHIOFALO, Marilu (University of Pisa); DE COCK, Mieke; FALETIC, Sergej; Dr FOTI, Caterina (Aalto University); FRANS, Renaat; Dr GÁBRIS, Aurél (QWorld Association); Dr GOORNEY, Simon (Aarhus University); Dr GREINERT, Franziska (Technische Universität Braunschweig); Dr JURČIĆ, Leon (University of Ljubljana); KOUPILOVÁ, Zdeňka; KRIJTENBURG-LEW-ERISSA, Kim (Utrecht University); MALGIERI, Massimiliano; Dr MÜLLER, Rainer (Technische Universität Braunschweig); ONORATO, Pasquale (University of Trento); POSPIECH, Gesche; STADERMANN, Kirsten; Dr UBBEN, Malte (Westfälische Wilhelms-Universität); Dr WOITZIK, Andreas (Westfälische Wilhelms-Universität); Dr POL, Henk (University of Twente)

Presenter: MERZEL, Avraham (The Hebrew University of Jerusalem)

Session Classification: Poster Session: LAB & MDR

Track Classification: Contemporary Physics and Modern Physics in School