

Interactive Visualisation for Teaching a Quantum Double Slit Experiment

Thursday 7 September 2023 15:20 (20 minutes)

In teaching quantum physics, visualisation is a useful tool to improve students' understanding of phenomena from the quantum realm. A double slit experiment has shown itself to be a good simple enough example where all important quantum concepts such as wave-particle duality, superposition, or measurement meet in a nice way. Here, we present a simple web-based interactive interface visualising a double slit experiment with electrons. Teachers and students would be able to conduct this experiment by themselves and explore behaviour of quantum objects step-by-step, following a path outlined by Richard Feynman in his famous lectures.

Contribution categories - primary focus

Primary and secondary school

Contribution categories - type

Application (shared experience, activity suggestions)

Primary author: LEGERSKÁ, Jana (Department of Physics Education, Faculty of Mathematics and Physics, Charles University)

Presenter: LEGERSKÁ, Jana (Department of Physics Education, Faculty of Mathematics and Physics, Charles University)

Session Classification: Presentations/Workshops