GIREP-EPEC 3–7 July 2023 Košice, Slovakia
GIREP-EPEC conference 2023
Physics learning promoting culture and addressing societal issues

Contribution ID: **192** Type: **Oral presentation**

Speaking the Unspeakable 2023 –an exhibit on quantum entanglement and Bell's inequality

Thursday 6 July 2023 11:30 (20 minutes)

We present a possible route to introduce the key concepts of quantum superposition and entanglement to secondary school students and to the general public avoiding mathematical difficulties. Our narrative is based on the description of key experimental findings, starting from Stern-Gerlach and Feynman double-slit experiments to the experimental proof of the violation of Bell's inequalities by 2022 Nobel prize winners. Furthermore, we exploit carefully chosen analogies and custom-made models to help visualisation and understanding. The narrative and the models have been successfully exploited in a public exhibition.

How would you like to present your contribution?

Hybrid from my own country (early in the conference day, best for Asia, Australia ...)

Target education level (primary)

Outreach

Target education level (secondary, optional)

Higher-secondary education

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Session Classification: Hybrid session - early

Track Classification: Contemporary physics and modern physics at school