



Contribution ID : 5

Type : **not specified**

Quantum Interference with Light Beams

Friday, 13 August 2021 13:25 (40)

Advances in quantum technologies have led to the use of quantum mechanics as a resource to carry and process information. The fundamentals of quantum mechanics are at the heart of the newly emerging technologies. Pairs of entangled photons constitute a vehicle to understand and teach these fundamentals deeply. Table-top arrangements and affordable optical components can be used in teaching laboratories aimed at introducing quantum fundamentals to students that will become the workforce of a future that relies on quantum physics. Quantum interference is a subtle yet important mechanism that allows information and computations at a non-classical level. Optical arrangements that steer and manipulate the state of entangled photons can be used as a vehicle for understand quantum interference deeply and to research it further.

Primary author(s) : Prof. GALVEZ, Enrique (Colgate University)

Presenter(s) : Prof. GALVEZ, Enrique (Colgate University)

Session Classification : key notes