

International Conference on

Quantum Physics and Nuclear Engineering

March 14-16, 2016 London, UK

Quantum mechanical aspects of teleportation

Roxana Buchta

Nottingham Trent University, UK

The work of Einstein and Bohr, as well as many other physicists, allows us to formulate a very powerful framework describing the physical world, creating a new and extremely important branch of studies called quantum information science. In this presentation, I'm going to discuss some of the most important aspects of quantum theory, such as quantum entanglement and how this relates to the main focus of this presentation, namely, quantum teleportation. I will be working through particular examples, which are vital in the teleportation process, and explaining the procedure using quantum circuits and quantum gates.

Biography

Roxana Buchta is a final year undergraduate mathematics student at Nottingham Trent University. Her interests extend to mathematical aspects of quantum mechanics and cryptography, and she hopes to pursue doctoral studies in the near future.

roxana.buchta2013@my.ntu.ac.uk

Notes: