

Mistakes on the way to a good idea: Peccei-Quinn Symmetry. A tribute to Roberto Peccei

Thursday 24 September 2020 18:00 (1 hour)

I will talk about the development of the idea now known as Peccei Quinn symmetry, and its consequences. I will use this work that I did together with Roberto Peccei to illustrate key features of how science progresses. While the problem we were addressing, and the answer we found for it are quite technical, this will not be a highly technical lecture.

Rather it will be a story about our confusions and the circuitous path to their resolution. It is also an illustration of how the mathematical descriptions of physics, as Heinrich Hertz pointed out in reference to Maxwell's equations, not only provide solutions to the question or problem that led to their development, but can also suggest things that their developers did not even dream about. This talk will also be a tribute to Roberto, emphasizing his attributes as a scientist, and as a person, that not only were key to this work but that made him a such a successful scientist and leader of scientific institutions throughout his career.

Session Classification: Hertz Lecture by Helen Quinn (SLAC)