



Helen Quinn

Theoretical Physicist

Born 1943

Prof. Helen Quinn is a theoretical physicist best known for the Peccei-Quinn theory to explain charge (C) and parity (P) symmetry in the strong nuclear force. The strong nuclear force is symmetric with respect to reversing the sign of the nuclear and electric charges in addition to being symmetric with space reversal. The Peccei-Quinn theory provide a mechanism to endow that symmetry in the strong nuclear force while keeping the weak nuclear interaction CP violating.

Prof. Quinn has been chair of the Board on Science Education of the National Academy of Sciences and she led the effort to produce A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas. This seminal education policy has led to the Next Generation Science Standards adopted in many states.

Quinn started her college career at the University of Melbourne in Australia studying meteorology before transferring to Stanford university. She did a postdoc at Deutsches Elektronen-Synchrotron (DESY) in Hamburg Germany. She was a faculty at Harvard University and then at SLAC the Stanford Linear Accelerator Center.