Contribution ID: **319** Type: **not specified**

100 Years of Proton

Monday 17 June 2019 19:30 (1 hour)

Protons were created shortly after the Universe began when the Quantum Chromodynamic (QCD) confinement forces went to effect. As a constituent of all atomic nuclei, they were first discovered by Rutherford in 1919. For the last 100 years, experimental and theoretical explorations of the proton structure have led to many important discoveries, some of which are reviewed in this talk. As of today, however, we are still grappling with an accurate description of the proton's fundamental properties, such as its mass and spin. Exa-scale computing plus a new generation of experiments may provide the final answer to the question "how does the Nature build the proton?"

Presenter: JI, xiangdong (university of maryland)

Session Classification: Public lecture