Colloquium
“The Proton Radius: Preliminary Results from the PRad Experiment”

Speaker:
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Abstract:
Two new extremely high precision measurements of the proton rms charge radius performed in 2010-2012 with muonic hydrogen atom demonstrated up to six standard deviations smaller values than the accepted average from all previous experiments performed with different methods on regular hydrogen. This discrepancy triggered the well-known “proton radius puzzle” in hadronic physics for the last several years. To address this puzzle, the PRad collaboration in May-June 2016 performed a novel magnetic-spectrometer-free ep-scattering experiment in Hall B at Jefferson Laboratory accumulating high statistics and a rich experimental data set. The specifics of the PRad experiment and the preliminary physics results, including the extracted proton radius, will be presented and discussed in this talk.

THURSDAY
March
21

4:15 pm
Jones Physical Science
Center Room 409
(Rogers Seminar Room)

Hosted By:
Dr. Steffen Strauch

Refreshments Served

Everyone Invited

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