

New measurements of the gluonic gravitational form factors

Tuesday, 31 October 2023 12:00 (30 minutes)

Heavy quarkonium production serves as a powerful tool to investigate the gluonic structure of the nucleon. The latest generation of experiments being conducted at Jefferson Lab in the 12 GeV era use near-threshold J/ψ production to explore the mass structure of the nucleon. In this presentation, I will focus on both current and forthcoming experiments aimed at unraveling the proton's gluonic gravitational form factors. I will discuss the new and upcoming results from J/ψ -007 in Hall C, GlueX, and CLAS12, with a particular emphasis on the recent experimental determination of the proton's gluonic gravitational form factors and mass radius. Additionally, I will explore future opportunities with the SoLID experiment at Jefferson Lab and with ePIC at the EIC.

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