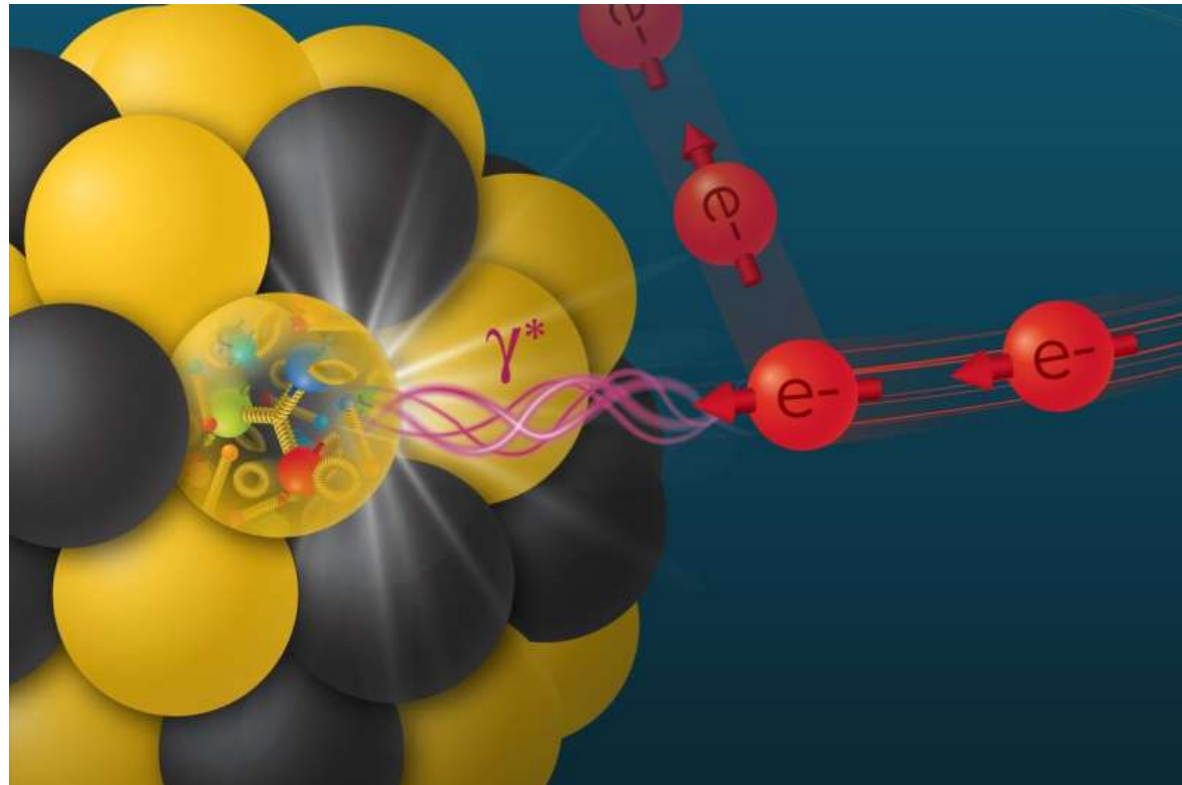


Predictions for Charge Distribution in Mesons for JLab12 and EIC and Test of QCD Factorization



Brookhaven's Top 10 Discoveries of 2024

Scientists calculate predictions for EIC measurements

Phys. Rev. Lett. 133, 181902

Accomplishment: Predicted electric charge distributions within mesons and tested the QCD factorization.

Methods: SciDAC project provided critical software and algorithms.

Impact: Predictions for JLab12 and EIC. Demonstrates reliability of QCD factorization in inferring quark, gluon dynamics from observed hadron properties.