

Exploring Excited Nucleons with Meson, Electron, and Photon Beams

The focus of the **workshop** will be on the spectrum and structure of nucleon resonances (N^*), as revealed through N^* electroexcitation amplitudes. Such fundamental information on the mechanisms of strong-coupling QCD is crucial to validating any proposed solution to the theory and explaining the emergence of mass. Precise data from both electron and pion beams are necessary for developing robust approaches for amplitude analyses, capable of delivering sound results for N^* quantum numbers and excitation amplitudes over a broad range of q^2 to be interpreted starting from the QCD Lagrangian.

Co-Chairs: Philip Cole (Lamar University)
Hiroyuki Sako (Japan Atomic Energy Agency)

Workshop 1WEA/1WEB (9 am to 12:30 pm)

Sunday, November 26, 2023

Hilton Waikoloa Village – Queens 4



The 2023 Fall Meeting of the Division of Nuclear Physics of the American Physical Society and the Physical Society of Japan



Craig Roberts (Institute for Nonperturbative Physics, Nanjing University)

Insights into Strong QCD from Baryon Structure

Tetsuo Hyodo (Tokyo Metropolitan University)

Compositeness of Hadrons and its Application to Baryon Resonances

Patrick Achenbach (Jefferson Lab)

Studies of Hadron Form Factors

Toshikazu Hashimoto (Research Center for Nuclear Physics, Osaka Univ.)

Studies of Baryon Resonances with Meson Photoproduction for the LEPS2/BGOegg Experiment at SPring-8

Gilberto Ramalho (Soongsil University and OMEG Institute)

Exposing Nucleon Resonance Structure using Electron and Pion Beams

Shinhyung Kim (Korea University)

N^* Spectroscopy in 3-Body Hadronic Reactions with HypTPC at J-PARC