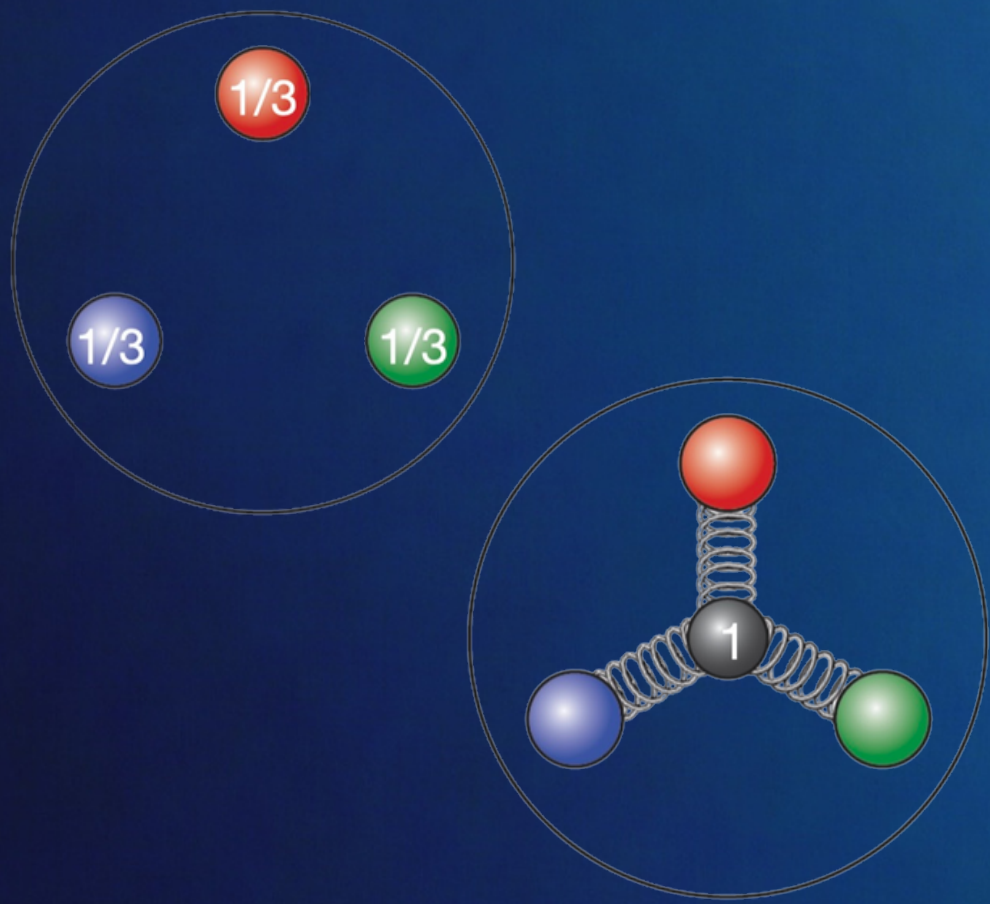


FIRST WORKSHOP ON BARYON DYNAMICS FROM RHIC TO EIC



Dates: Jan 22 – 24, 2024

Location: Center for Frontiers in Nuclear Science (CFNS), Stony Brook University

Format: In-person & zoom

Participation: Invited Talks + Open Mic Discussion

Registration Deadline: Jan 15th, 2024

No registration fee - Limited student support available

Scientific Motivation:

This workshop aims to address fundamental questions such as what carries the baryon quantum number and how a baryon is stopped in high-energy collisions, which have profound implications for understanding the baryon structure. It also challenges our current knowledge of QCD and its non-perturbative aspects, such as baryon junctions and gluonic topology. The workshop will explore the origin and transport of baryons in high-energy collisions, from the AGS/SPS/RHIC/LHC to JLab F_π , HERA/EIC, and discuss the experimental and theoretical challenges and opportunities in this field.

Key Topics:

- Baryon junctions and gluonic topology
- Baryon and charge stopping in heavy-ion collisions
- Baryon transport in photon-induced processes
- Baryon-meson-transition in backward u-channel reaction
- Models of baryon dynamics and baryon-rich matter
- Novel experimental methods at EIC

Keynote speaker: Gabriele Veneziano

Organizers:

D. Kharzeev (SBU/BNL)

W. B. Li (CFNS)

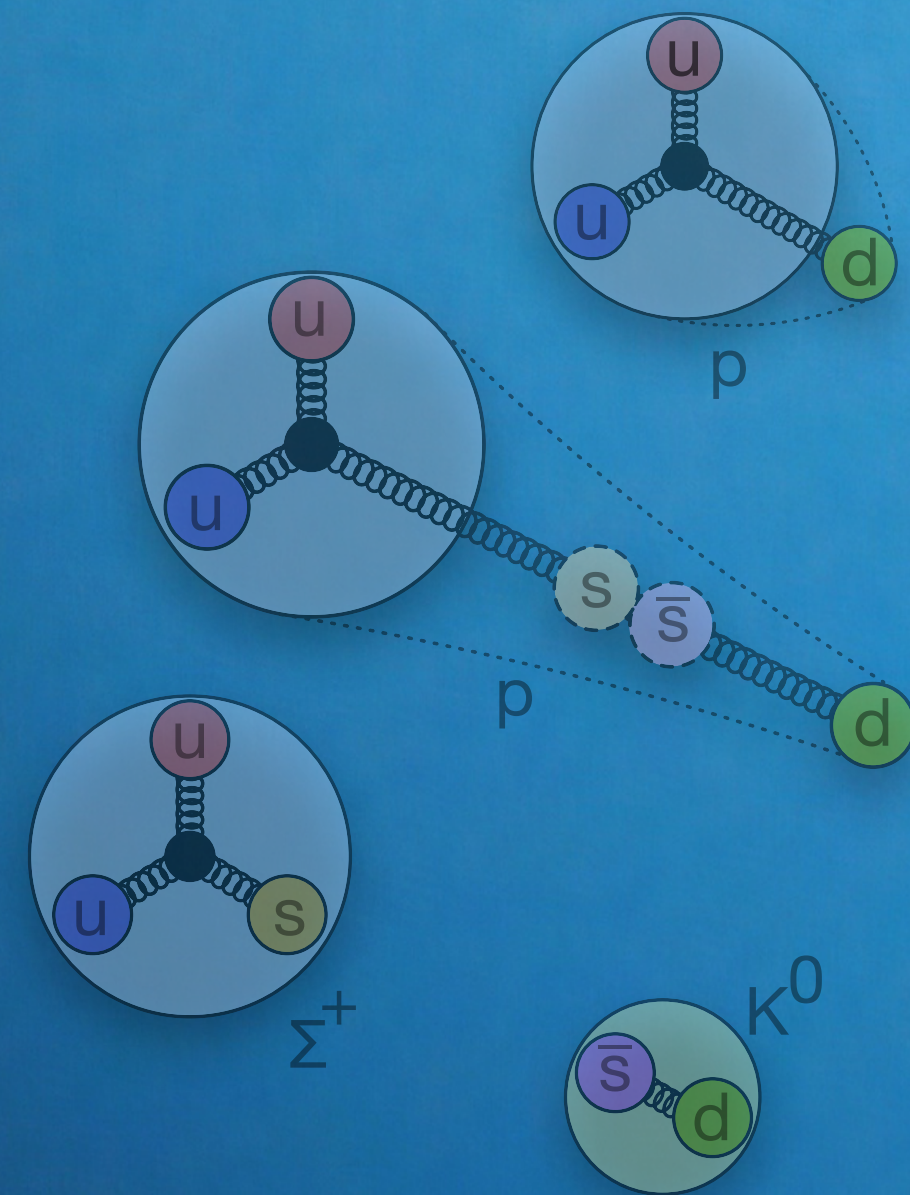
N. Lewis (Rice)

J. Noronha Hostlar (UIUC)

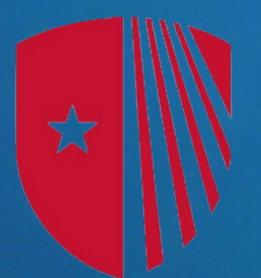
C. Shen (Wayne State/RBRC)

P. Tribedy (BNL)

Z. Xu (BNL)



Center for Frontiers
in Nuclear Science



Stony Brook
University

Webpage: <https://indico.cfns.sbu.physics.sunysb.edu/event/113/>

Contact: ptribedy@bnl.gov