

Special Issue

Advances in QCD: Bridging Heavy-Ion Collisions and Electron Scattering at the Electron-Ion Collider

Message from the Guest Editor

This Special Issue focuses on the latest theoretical advancements and experimental measurements that investigate QCD through observables accessible at the EIC. By bringing together both theoretical and experimental contributions, it aims to foster a deeper understanding of the non-perturbative QCD landscape and the emergent phenomena it encapsulates. In addition, submissions on innovations in detector instrumentation and cutting-edge technologies, including applications of Machine Learning, Artificial Intelligence, and High-Performance Computing, are highly encouraged. Topics are but not limited to:

- quantum chromodynamics
- non-perturbative QCD
- many-body systems
- quark–gluon plasma
- hadrons
- heavy-ion collisions
- electron scattering
- electron–ion collider
- machine learning/artificial intelligence
- high-performance computing

Guest Editor

Dr. Zhaozhong Shi

College of Engineering and Physical Sciences, University of New Hampshire, Durham, NH 03824, USA

Deadline for manuscript submissions

closed (30 November 2025)



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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Armen Sedrakian

1. Frankfurt Institute for Advanced Studies (FIAS), D-60438 Frankfurt am Main, Germany
 2. Institute of Theoretical Physics, University of Wroclaw, 50-204 Wroclaw, Poland
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