

Special Issue

Analysis Techniques and Algorithms for QCD Studies

Message from the Guest Editors

This Special Issue of *Universe* from MDPI is dedicated to analysis techniques used in particle collision experiments ($e+e^-$, ep, pp, and heavy ions) that establish quantum chromodynamics (QCD) as a theory of strong interactions. The main topics cover the precision measurements of hadronic jets, forward jet physics, boosted jets and jet substructures, event shapes, event flows, studies of parton density functions, hadronic structure, measurements of the strong coupling constant, particle production, heavy flavour, and particle spectroscopy. Proposals for novel observables that can verify QCD and constrain its parameters beyond the already achieved precision are particularly welcome. Tools and algorithms used for QCD measurements, such as jet clustering algorithms, track and particle-flow reconstruction, and methods based on machine learning techniques will also be covered.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

Editor-in-Chief

Prof. Dr. Lorenzo Iorio
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