Present and future perspectives in Hadron Physics



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3DPartons: recent achievements and prospects

The need for efficient and accurate numerical codes to study the 3D structure of hadrons is today more than ever an essential requirement. In this respect the virtual-access (VA) packages of STRONG2020 have played a leading role. In this contribution, we will present the latest achievements of the 3DPartons VA package of STRONG2020. On top of the code developments accomplished over the past years, we will highlight some of the most relevant physics results obtained within 3DPartons, including theoretical and numerical advances that have contributed to enrich the code infrastructure developed by this work package.

We will also consider future perspectives of 3DPartons. In particular, we will discuss how this work package can evolve by undertaking new avenues aimed at supporting and exploiting the activities of current and future facilities. Indeed, the present physics programmes of CERN, Jefferson Laboratory, and Brookhaven National Laboratory offer many opportunities in the short and medium term to the study of the hadronic structure. Moreover, the advent of the Electron-Ion Collider broadens even further the range of possibilities, allowing 3DPartons to potentially encompass a wider range of subjects.

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