Contribution ID: 44 Type: Talk

Electromagnetic and gravitational local spatial densities for hadrons

Thursday, 19 October 2023 16:20 (30 minutes)

The issue of a proper definition of the spatial distributions of matrix elements of local operators has attracted much attention in the last few years. In the talk, the novel definition of electromagnetic and gravitational local spatial densities of hadrons will be discussed. We will start from the matrix elements parametrised in terms of the form factors and connect them with the corresponding spatial densities using the sharp localisation approach. We will show how the traditional densities in the Breit frame appear and how they differ from densities in the sharp localisation approach. In the end, we will discuss the interpretation of densities, the structure of hadrons and their fundamental properties.

Parallel Session

Nucleon Structure in DIS

Primary author: PANTELEEVA, Iuliia (Ruhr-University Bochum)

Presenter: PANTELEEVA, Iuliia (Ruhr-University Bochum)

Session Classification: Nucleon Structure in DIS