

## Overview of the physics performance of the ECCE detector

*Tuesday 3 May 2022 10:00 (20 minutes)*

An overview of the science programme accessible with the proposed ECCE detector at the future Electron-Ion Collider (EIC) will be presented. To this effect, results from complete ECCE GEANT4 simulation studies of physics observables will be shown. The selection of presented results cover the capabilities of the ECCE detector in addressing the origin of the nucleon spin, the three-dimensional structure of the nucleon, the study of saturation effects, and the study of the meson structure. Finally, some results on studies of precision Electroweak and beyond-the-Standard-Model Physics will also be discussed.

### Submitted on behalf of a Collaboration?

Yes

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