EpIC: A Monte Carlo event generator for exclusive processes

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There has been an increasing interest in exclusive processes in recent years. Part of this interest stems from the open questions of how the spin of the proton is decomposed into its intrinsic spin and orbital motions, along with the possibility of gaining energy-momentum densities through exclusive processes. During this presentation, we will introduce the EpIC Monte Carlo event generator. By utilizing the PARTONS framework, the EpIC generator offers a flexible structure and a variety of model options which make it an attractive tool for the community. In addition, the EpIC generator incorporates first-order radiative corrections in its architecture. Therefore, EpIC offers a comprehensive set of features that will enable nucleon structure to be studied more deeply through impact studies on future electron-ion colliders.

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