

# Study of soft QCD phenomena and double parton interaction in ATLAS

*Wednesday 27 August 2025 15:00 (20 minutes)*

Despite the success of perturbative QCD predictions at the high-energy regime, QCD itself remains mysterious at its nominal scale (QCD scale). The LHC offers rich opportunities to probe the core of QCD related questions, by studying minibias events, double parton interactions, small- $x$  and diffractive processes, as well as correlations in hadronization processes. This talk will summarize recent achievements from ATLAS on this topic.

**Authors:** DJAMA, Fares (Universite d'Aix - Marseille II (FR)); DJAMA, Fares (CNRS/IN2P3 CPPM - Aix-Marseille Univ.)

**Co-author:** MEONI, Evelin (Universita della Calabria e INFN (IT))

**Presenter:** DJAMA, Fares (CNRS/IN2P3 CPPM - Aix-Marseille Univ.)

**Session Classification:** Parallel