

Multi-strangeness hadron production and their evolution in the proton proton collision

The latest results from proton-proton collisions, reported from experiments at CERN, have provided evidence of collective phenomena similar to those observed in relativistic heavy ion collisions. The enhancement of strangeness as a function of multiplicity in proton-proton collisions is considered a crucial result, as it supports the potential creation of mini Quark-Gluon Plasma. In the present work, we report the evolution with the energy of different kinematic variables related to strangeness hadrons. The analysis is done using an EPOS event generator, with cascade and hydrodynamical models to follow the evolution of the medium created in the collisions. We emphasize the importance of measuring and identifying multi-strange hadrons. Finally, the results are compared to experimental data to get preliminary predictions.

Authors: Prof. CUAUTLE FLORES, Eleazar (UNAM); BAUTISTA LEON, Jose Francisco (UNI)

Presenter: BAUTISTA LEON, Jose Francisco (UNI)