



Beitrag ID: 77

Typ: Poster

## Open heavy flavour production from the high mass dilepton spectrum in pp collisions at $\sqrt{s} = 13$ TeV with ALICE

*Dienstag, 28. März 2023 18:15 (2 Stunden)*

Production measurements of heavy quark pairs in pp collisions are a known tool to test perturbative quantum chromodynamics calculations. In addition, they provide a reference for the corresponding studies in nuclear collisions. Indeed, in Pb-Pb collisions, the heavy quarks are produced at the early stages of the collision and can then experience full medium evolution. Open heavy flavor hadrons can therefore probe the quark-gluon plasma properties, as they are sensitive to the heavy quark energy loss in medium. A detection technique that was little explored at LHC energies is the analysis of the high-mass (i.e. above the  $J/\psi$  mass) continuum of the dilepton invariant mass spectrum, which is dominantly populated by semi-leptonic decays of charm and beauty hadron pairs in pp collisions.

In this presentation, new preliminary results from ALICE on the extraction of the charm and beauty hadron contributions to the high-mass dilepton continuum, at forward rapidity in pp collisions at  $\sqrt{s} = 13$  TeV, will be presented. Results from Pythia 8 Monte Carlo simulations used as input for the template fit of the data will be discussed.

### Experiment/Theory

ALICE

### Affiliation

ALICE

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**Sitzung Einordnung:** Poster Session

**Track Klassifizierung:** Heavy flavor and quarkonia