International Workshop on Future Linear Colliders 2025



Contribution ID: 162 Type: Talk

The dead cone effect in heavy quark jets

Thursday 23 October 2025 10:40 (20 minutes)

The production of heavy-quark jets is accompanied by gluon bremsstrahlung. This radiation is suppressed at small angles and is proportional to the heavy-quark mass, a phenomenon known as the dead cone effect. In this talk, we present this effect for charm and bottom quark initiated jets using data from Z-boson decays in momentum space in the e+e- annihilation. The observed suppression is significantly stronger than that reported by the ALICE collaboration at the LHC. These findings will also be compared with preliminary results on the same effect in top-quark-initiated jets.

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Session Classification: Flavour, Top and QCD

Track Classification: Physics: Flavour, Top and QCD