

# Jet shape and redistribution of the lost energy from jets in Pb-Pb collisions at the LHC in a multiphase transport model

Jet-medium interaction involves two important effects: jet energy loss and medium response. The search for jet-induced medium response is one of the hot topics in jet quenching study in relativistic heavy-ion collisions. In this work, we perform a systematic study on how the lost energy from hard jets evolves with the bulk medium and redistributes in the final state of heavy-ion collisions via a multi-phase transport (AMPT) model.

## Summary

Within the string melting scenario of the AMPT, we compute the jet shape function to very large radius via the correlations between jets and charged particles in Pb-Pb collisions at the LHC and compare to proton-proton collisions. Our result indicates that a large fraction of the lost energy from hard jets is carried by soft particles at large angles relative to jet axis.

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