

# Jet-induced medium excitation in gamma-hadron and hadron-hadron correlations

*Tuesday 7 February 2017 09:30 (20 minutes)*

We use a Linear Boltzmann Transport model (LBT model) coupled to (3+1)D ideal hydrodynamic evolution in real time with fluctuating initial conditions to simulate both the transport of jet shower partons and jet-induced medium excitation. In this coupled approach, soft partons from medium recoil and induced radiation from propagation of energetic shower partons in the Linear Boltzmann transport (LBT) model provide a source term to the 3+1D hydrodynamic evolution of the medium, which in turn provide medium profile in real time for the parton shower propagation. With this coupled approach we investigate the hadrons spectrum in the whole transverse momentum region and focus on gamma-hadron and hadron-hadron correlations to study the effect of both jet-induced medium excitations and jet quenching due to parton energy loss

## Preferred Track

Jets and High pT Hadrons

## Collaboration

Other

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**Session Classification:** Parallel Session 1.4: Jets and High pT Hadrons (I)

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