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# Flow-Driven Conical Correlations in Heavy-Ion Collisions

We use (3+1)-dimensional hydrodynamic simulations to describe the propagation of a jet through an opaque medium and to investigate the underlying jet-medium interactions. We discuss that the double-peaked structure seen in the two-particle correlations measured at the Relativistic Heavy Ion Collider (RHIC), suggested as a signal for the creation of a Mach cone, can arise due to the averaging over many events in a transversally expanding background. We find that the jet-induced away-side yields are quite insensitive to different energy and momentum loss scenarios, different jet velocities, and system sizes. Our claim can be experimentally distinguished from a 'true' Mach cone by analyzing hard-soft correlations induced by heavy-flavor jets, in particular by verifying that the double-peak structure stays the same even if the heavy quarks move subsonically.

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