

Abstract Submitted  
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**Jet Quenching in Relativistic Heavy-Ion Collisions** FABIO CANEDO, LEONARDO CAMPOS, MARCELO MUNHOZ, Institute of Physics - University of Sao Paulo, JACQUELYN NORONHA-HOSTLER, JORGE NORONHA, University of Illinois at Urbana-Champaign — In this work jets were simulated on top of either event-by-event 0+1 or 2+1 relativistic hydrodynamic backgrounds using JEWEL+vUSPhydro with two different initial conditions: TRENTo and MC-KLN. The effects of hydrodynamics and initial state on the shape and substructure observables (such as mass,  $p_T^D$  and girth) and on jet  $v_n$  are presented. No distinguishable impact on shape and substructure observables was seen whereas the comparison between jet  $v_n$  calculations and experimental data is significantly improved by the insertion of a realistic hydrodynamic background.

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