

Constraining energy loss from high-pt azimuthal asymmetries

Tuesday, 2 October 2018 11:05 (20 minutes)

The nuclear modification factor, R_{AA} , has been satisfactorily described by various jet quenching models. Nonetheless, all these formalisms seemed to underpredict the high p_T (> 10 GeV/c) elliptic flow, v_2 . Recently, it has been argued that by the inclusion of event-by-event fluctuations in the soft sector the $R_{AA} - v_2$ problem may be solved. In order to confirm that this is indeed the answer to the puzzle, one should consider the effects of changing the energy loss implementation. We will show, within the ASW Quenching Weights and EKRT hydrodynamics, that the description of the high- p_T harmonics is still a challenge and discuss the opportunities that it offers to constrain the detailed mechanism of energy loss.

Summary

Primary author: Dr ANDRES, Carlota (Jefferson Laboratory)

Co-authors: ARMESTO PEREZ, Nestor (Universidade de Santiago de Compostela (ES)); Dr PAATELAINEN, Risto (University of Helsinki); NIEMI, Harri (Johann Wolfgang Goethe-Universität); ZURITA, Maria Pia

Presenter: Dr ANDRES, Carlota (Jefferson Laboratory)

Session Classification: Parallel 2