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# Collectivity and manifestations of minimum-bias jets in high-energy nuclear collisions

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## Content

Collectivity, as interpreted to mean flow of a dense medium in high-energy nucleus-nucleus (A-A) collisions and described by hydrodynamics, has recently been attributed also to smaller collision systems – p-A and even p-p collisions – based on certain analysis of LHC data. However, alternative analysis methods reveal that some data features attributed to flows are actually manifestations of minimum-bias (MB) jets (dominated by jets near 3 GeV). In this presentation I describe the differential structure of single-particle hadron $p_t$ spectra from SPS to LHC energies in the context of a two-component (soft + hard) model (TCM) of hadron production. I relate the spectrum hard component to measured properties of isolated jets. I use the spectrum TCM to predict the systematics of ensemble-mean $\bar{p}_t$ in p-p, p-A and A-A collision systems over a large energy interval, with accuracy at the percent level. Detailed comparisons of the TCM with both spectrum and correlation data strongly suggest that MB jets (jets being also a "collective" phenomenon) play a dominant role in hadron production near midrapidity. Claimed evidence for flow phenomena is better explained (more simply and quantitatively) as jet manifestations predicted via measured properties of isolated jets.

## Session

Collectivity in high energy collisions

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