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Flow Measurements at the RHIC and LHC, What Have We Learned? What is Needed?

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Higher-order flow coefficients, v_n, reflect the space-time evolution process of hot and dense medium formed in relativistic heavy ion collisions. In the low p_T region, experimental v_n data at the highest energy A+A collisions at the RHIC and LHC is successfully described by various hydrodynamic calculations that employ Glauber/CGC initial conditions for heavy ion collisions and a shear viscosity of the medium. Our goal is to determine a single combination of an initial state and a viscosity value which can describe the data. However, there are currently more than one such combination and further constraints from experiments and theories are of importance. Azimuthal anisotropy v_n is also observed in small collisions systems such as p(d)+A collisions at RHIC and LHC. The CGC (initial state effect) and hydrodynamic expansion (final state effect) are suggested as a possible explanations. Understanding the primary causes of v_n evolution is important for the understanding of small collision systems and might provide useful information to the understanding of the initial condition in A+A collisions. In this talk, we will (i) summarize what we have observed in p(d)-A and A+A collisions at the RHIC and LHC, and (ii) discuss what has to be done as next step towards more precise understanding of the properties of the medium.