

Abstract Submitted
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Perfect Fluid at RHIC KAZUE MATSUYAMA — I will discuss the evidence that a quark-gluon plasma, with the properties of a perfect fluid, has been created at RHIC. Observation of Au-Au collisions at ultrarelativistic energies reported a surprising result: instead of a weakly coupled quark gas, that was expected (from QCD properties) at very high densities, experiment found a strongly coupled liquid with very small viscosity. This was deduced, in part, from the elliptic flow pattern of the fireball created in collisions. The distribution of charged particles produced in collisions, as a function of azimuthal angle and the transverse momentum, was measured, and the parameters v_i (Fourier harmonics of the angular dependence) were determined to describe the elliptic flow pattern of the fireball. Jet quenching provides further evidence of the existence of the quark-gluon plasma.

- Prefer Oral Session
 Prefer Poster Session

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