

Measurements of direct photons in AuAu collisions with PHENIX

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The PHENIX experiment has published direct photon yields and elliptic flow coefficients (v_2) from Au+Au collisions at RHIC energies. These results have sparked much theoretical discussion. The measured yields and flow parameters are difficult to reconcile in current model calculations of thermal radiation based on hydrodynamic time evolution of the collision volume. New sources of photons, e.g. initial state emission related to strong magnetic fields, have been proposed as alternatives.

Our latest analyses which use high statistics data from Run-7 and Run-10 allow to determine yields and harmonic coefficients (v_n) with finer granularity in centrality and photon momentum and down to p_T as low as 400 MeV/c. In this talk we will summarize the current status and present new results from PHENIX.

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