

## Properties of the matter created in heavy ion collisions –results from the PHOBOS experiment

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In the collisions of ultrarelativistic heavy ions the energy of the nuclei is released in a small volume leading to the creation of a hot and dense nuclear matter. The study of the particles produced from it gives the information on the conditions in the early stage of the collision and the evolution of the system. The PHOBOS experiment provides unique data on the particle production in the almost full phase space and down to very small transverse momenta.

The talk will present an overview of recent results from the PHOBOS experiment. The extensive studies of charged particles production are based on the multiplicity measurements in a very wide pseudorapidity range and reveal strong short and long range correlations. Their dependence on the collision centrality for the two colliding systems: Au+Au and Cu+Cu is analyzed. In addition both the high and very low  $p_T$  distributions, the particle ratios and elliptic flow results will be shortly presented.

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