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Estimation on Local Energy Density in Relativistic Heavy Ion Collisions

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Abstract: Energy density for the central region in relativistic heavy ion collisions can be estimated via the pseudorapidity distribution of transverse energy. The way to estimate the local energy density for the central region in relativistic heavy ion collisions is proposed, in which only final state particles emitted from the same source are included. The arrived energy density in NA49 experiments is about 1.03 GeV/fm^3.

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