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Distribution of energy-momentum tensor around static quarks in SU(3) gauge theory at high temperature

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In this study, we explore the distribution of energy-momentum tensor around the static quark and antiquark in SU(3) pure gauge theory at finite temperature. Double extrapolated transverse distributions on mid-plane of the flux tube have been presented for the first time at nonzero temperature. Also, we investigate the spatial distributions of the flux tube on the source plane obtaining from the stress tensor for several $q\bar{q}$ separations and temperatures above and below the critical temperature. The resultant distributions show the detailed structure of the flux tube. Finally, we show the dependence of F_{stress} that is computed from the integral of the stress tensor on the distance between the quark and antiquark on a finer lattice.

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