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## Energy-momentum tensor correlation function in Nf=2+1 full QCD at finite temperature

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We measure correlation functions of energy-momentum tensor in Nf=2+1 full QCD at finite temperature by applying the gradient flow method both to the gauge and quark fields.

Our main interest is to study the conservation law of the energy-momentum tensor and to extract thermodynamical quantities from the correlation function.

We adopt a fine lattice spacing  $a=0.07$  (fm) and cover a wide range of temperature region  $174 \leq T \leq 697$  MeV.

The ud quark mass is rather heavy with  $m_\pi/m_\rho \simeq 0.63$  while the s quark mass is set to approximately its physical value.

**Primary author:** TANIGUCHI, Yusuke (University of Tsukuba)

**Co-authors:** Mr SUZUKI, Asobu (University of Tsukuba); Prof. SUZUKI, Hiroshi (Kyushu University); Prof. KANAYA, Kazuyuki (University of Tsukuba); Dr KITAZAWA, Masakiyo (Osaka University); Dr EJIRI, Shinji (Niigata University); Dr UMEDA, Takashi (Hiroshima Univ.)

**Presenter:** TANIGUCHI, Yusuke (University of Tsukuba)