Quark number susceptibility of high temperature and finite density QCD

Presenter: Ari Hietanen — University of Helsinki
Ari Hietanen, Kari Rummukainen

We use reduced effective field theory (EQCD) and lattice calculations to determine the quark number susceptibility of QCD at high temperature ($T > 2T_c$). We also use analytic continuation to obtain results at finite density. The results extrapolate well from known perturbative expansion (accurate in extremely high temperatures) to other lower temperature lattice data.