Charmonium spectra and dispersion relations with maximum entropy method in extended vector space ATSURO IKEDA, Osaka University — We study charmonium properties at finite temperature and finite momentum in quenched lattice QCD with an extended maximum entropy method. We analyze the spectral functions and the dispersion relations of charmonia in an extended vector space, which is a product space of two different lattice correlators. We find that there is a mass shift of charmonium in pseudoscalar and vector channels at finite temperature. Our result shows that the dispersion relations are nevertheless consistent with Lorentz invariant form even near the dissociation temperature.

Atsuro Ikeda
Osaka University