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Reformulation of a chiral random matrix model in the thermodynamic limit MUNEHISA OHTANI, Kyorin Univ. — The chiral random matrix theory provides a universal framework to study the low-lying Dirac eigenmodes and describes chiral phase transition suitably. In this theory, we had considered distributions of topological zero modes to incorporate effects of the axial anomaly and obtained thereby well defined topological susceptibility as a function of temperature. In this talk, we propose a reformulation of the chiral random matrix model with the proper distribution of the topological zero modes in the thermodynamic limit by means of the sectional measurement and report the temperature dependence of physical quantities associated with the chiral phase transition.

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