Abstract Submitted
for the HAW14 Meeting of
The American Physical Society

Meson vector couplings and SU(4) flavor symmetry KADIR UTKU CAN, Tokyo Institute of Technology, GURAY ERKOL, Ozyegin University, MAKOTO OKA, Tokyo Institute of Technology, TORU T. TAKAHASHI, Gunma College of Technology — Meson-exchange models use SU(4) flavor symmetry to determine the coupling constants in constructing the effective Lagrangian. We extract the vector form factors and electric charge radii of light and charmed mesons in $2+1$-flavor Lattice QCD, which allow us to study the SU(4) flavor symmetry and its breaking. We compare our results with those from other theoretical approaches such as QCD sum rules.

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Date submitted: 29 Jun 2014 Electronic form version 1.4