

Abstract Submitted
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Charmed-Meson Scattering in lattice QCD TAKUYA YAGI, Univ. of Tokyo and KEK, MUNEHISA OHTANI, Kyorin Univ. and KEK, OSAMU MORIMATSU, KEK, Univ. of Tokyo and SOKENDAI, SHOJI HASHIMOTO, KEK and SOKENDAI — The interaction of D_1 and D^* mesons is studied in lattice QCD aiming at obtaining some hint on the nature of the $Z(4430)$. Our calculation is done using the Wilson fermion on a quenched $24^3 \times 48$ lattice. We calculate the correlation functions of D_1 and D^* mesons and obtain the energy in a finite box, from which we extract the scattering length of D_1 and D^* mesons by means of Lüscher's formula.

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