

Abstract Submitted
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Ultracold collisions properties of two dipoles in a Fermi sea¹ W. BLAKE LAING², CHRIS WALSH, HONG Y. LING, Rowan University — We investigate the low-energy scattering properties of two bosonic dipoles in the presence of a Fermi sea. The interaction between each dipole and the Fermi sea gives rise to an induced potential between the dipoles which is oscillatory, isotropic, and (approximately) bounded by $1/r^3$. We numerically investigate the momentum dependence of the low-energy s-wave phase shift. The presence of the Fermi sea adds a potential experimental control in few-body phenomena.

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