

## LONG-RANGE INTERACTION OF GROUND- AND EXCITED-STATE HELIUM AND ALKALINE-EARTH ATOMS

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Calculations of anisotropic asymptotic coefficients, arising in the interaction of like (helium and a number of alkaline earth) atoms in the ground and excited states are presented. Correlated wave functions in Hylleraas coordinates are employed to obtain dynamic polarizabilities and long-range coefficients for  $L=0$  and  $L=1$  atomic pairs. Comparisons will be made with other calculations, where available.