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Three-state Feshbach resonances in the presence of external fields
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We present an analytical analysis of Feshbach resonances involving three states in heteronuclear atom-atom collisions in the presence of external static electric and magnetic fields. The Hamiltonian of study involves a resonance coupling between a p-wave continuum state and a bound molecular state and a coupling between an s-wave continuum state and the p-wave continuum state. There is no direct coupling between the s-wave scattering state and the bound state of the dimer. The dependence of elastic s-wave scattering on the s-p and p-bound couplings is described.

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