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Full-dimensional quantum dynamics of ultracold Li-CaH collisions in a magnetic field TIMUR TSCHERBUL, University of Nevada, Reno, JACEK KLOS, University of Maryland, MASATO MORITA, University of Nevada, Reno — We present a theoretical study of ultracold Li-CaH collisions in a magnetic field using a full-dimensional potential energy surface with an explicit dependence on the CaH vibrational coordinate. Elastic and inelastic cross sections will be presented as a function of magnetic field and implications will be discussed for sympathetic cooling of $^2\Sigma$ molecular radicals with ultracold alkali-metal atoms in a magnetic trap.

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