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Three-body collisions of ultracold dipolar molecules[1] LUCAS LASSABLIÈRE, GOULVEN QUÉMÉNER, Université Paris-Saclay, CNRS, Laboratoire Aimé Cotton — A lot of effort is devoted nowadays to produce ground state ultracold molecules in high densities. Two-body collisions as well as three-body collisions can occur in those gases. In this poster, we present the hyperspherical formalism used to describe three-body collisions. We adapated the formalism of Kendrick et al. [1] to three identical particles such as dipolar molecules and including an electric field. To avoid numerical limits, we found a model to treat the dipolar molecules without their internal rotational structure. With this formalism, we can compute the adiabatic energies and rate coefficients for the three-body collisions. [1] B. K. Kendrick et al., J. Chem. Phys 110, 6673 (1999).

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