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Destruction of p -wave weakly bound molecules in a gas of spin-polarized fermions JOSE P. D'INCAO, CHRIS H. GREENE, Department of Physics and JILA, University of Colorado, Boulder, CO 80309 — We have studied collisional aspects which might affect the lifetime of p -wave molecules created in ultracold spin-polarized fermi gases near a Feshbach resonance [1]. Atom-molecule inelastic collisions might be the main process in which the collision products can be released from typical traps. Our study allows us describe the dependence of the collision rates on the p -wave scattering length, which is crucial for understanding the stability of such molecules in the strongly interacting regime. [1] H. Suno, B. D. Esry, and C. H. Greene, Phys. Rev. Lett. 90, 053202 (2003). This work was supported in part by the National Science Foundation.

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