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Li + Na collisions at ultracold temperatures MARKO GACESA, ZORAN PAVLOVIC, PHILIPPE PELLEGRINI, ROBIN CÔTÉ, University of Connecticut — We are studying ultracold scattering properties of Li isotopes and Na in the presence of a magnetic field. Our main interest is to predict the widths and positions of Feshbach resonances using coupled-channels calculations and compare them to the recent experimental observations. Additional information about these resonances could be used to produce ultracold heteronuclear molecules. Depending on the Li isotope considered such molecules would allow the study of degenerate Bose-Fermi mixtures with adjustable interactions or Bose-Einstein condensation of polar molecules.

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