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Detection of Feshbach resonances between Na and Cs atoms ELIOT F. FENTON, JESSIE ZHANG, YEN-WEI LIN, KANG-KUEN NI, Harvard University — Due to its large electric dipole moment and resulting long-range interactions, NaCs is a promising candidate for quantum information experiments. Trapping of other bi-alkali molecules has relied on the formation of Feshbach molecules, followed by STIRAP to the rovibrational and electronic ground states. Here, we report on detection of Feshbach resonances between sodium and cesium atoms trapped in a single optical tweezer. These results allow for ground-state trapping of NaCs molecules.

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