

Abstract Submitted
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Experiments with an ultracold Na and Rb mixture¹ DAJUN WANG, FUDONG WANG, XIAOKE LI, XIAODONG HE, BING ZHU, JUN CHEN, MINGYANG GUO, Department of Physics, The Chinese University of Hong Kong, Shatin, Hong Kong — Na and ⁸⁷Rb are two of the most popular atoms for ultracold physics research. Their mixture, which has been investigated little previously, is also of great interest for many different applications. We are especially interested in the possibility of producing ground-state ultracold polar molecules with a large dipole moment and stable against two-body reactions by association of these two atoms. Here, I will present our recent progress in this direction, including the first production of a double BEC of Na and Rb atoms and the study of their inter-species magnetic Feshbach resonances. Recent progress in producing NaRb Feshbach molecules will also be discussed.

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Dajun Wang
Department of Physics, The Chinese University of Hong Kong,
Shatin, Hong Kong

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