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Towards ultracold ground-state NaRb molecule¹ MINGYANG GUO, BING ZHU, XIAOKE LI, BO LU, FUDONG WANG, XIN YE, DAJUN WANG, Department of Physics, the Chinese University of Hong Kong — The ground-state ²³Na⁸⁷Rb molecule is chemically stable and has a permanent electric dipole moment as large as 3.3 Debye. These properties make it a promising candidate for investigating dipolar quantum gases. Recently, we have realized weakly bound ²³Na⁸⁷Rb Feshbach molecules via magneto-association. Here, we will present our results on excited-state molecular spectroscopy investigation starting with these Feshbach molecules. The prospects of transferring ²³Na⁸⁷Rb to the absolute ground state will also be discussed.

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