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Dipolar gases of ground state molecules: NaK in Hannover
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MANN, SILKE OSPELKAUS, Institut für Quantenoptik, Leibniz Universität Han-
nover — In the coming years, dipolar interactions will be one of the most promising
tools in the field of ultracold atoms. Since the first realization of degenerate gases
of dipolar atoms and the creation of large diatomic molecular samples in their rovi-
brational groundstate [1], a lot of experimental and theoretical interest has been
focused on long-range interactions, anisotropy, exotic phase transitions and other
peculiar phenomena. We will update you on our work in Hannover with details on
the NaK experimental apparatus and on our effort to determine the most efficient
adiabatic transfer from weakly-bound dimers to ground state dipolar molecules [2].

[1] K.-K. Ni et al, Science 322, 231 (2008).

[2] T.A.Schulze et al, Phys. Rev. A 88, 023401 (2013)

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