



IRTG-Seminar

Justin Baier

(Student talk)

“Deceleration of molecular beams by electric fields (Stark-deceleration)”

Cold molecules provide access to fundamental research and give rise to a variety of new possibilities in many fields. To cool down molecules to suitable temperatures, several methods exist. This review deals with the subject of Stark deceleration, a technique which makes use of the interaction between an external electric field and the electric dipole moment of a molecule to decelerate those. The basic theory and different experimental realizations will be discussed. Additionally a couple of achieved results and further applications of the decelerated molecules will be given.

**Tuesday, June 16, 2015, 4:00 p.m., HS II,
Physik-Hochhaus, Hermann-Herder-Str. 3**

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