

**SONDERSEMINAR/SPECIAL SEMINAR**  
**LMU/MPQ**

**am:** Thursday, November 10, 2011

**Uhrzeit:** 9:30 a.m. s.t.

**spricht:** Dr. Samuel A. Meek

**Thema:** Prospects for Precision Spectroscopy  
using Stark-decelerated Molecules

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**Ort:** Max-Planck-Institut für Quantenoptik H.-W. Hörsaal  
MPQ, Audience Hall

**gez. Prof. T.W. Hänsch**

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**Abstract**

In the last decade, Stark deceleration has developed into a powerful tool for producing samples of slow molecules. These samples have been used for a variety of applications, such as examining low-energy molecular collisions and measuring the lifetime of long-lived excited states. In this talk, I will outline the prospects of using Stark deceleration to improve the resolution of precision spectroscopy experiments on molecules. Planned experiments based on this Stark-decelerated molecular beam could help to further constrain the magnitude of the electron electric dipole moment or the time variation of the electron-proton mass ratio.