



Institutskolloquium

Am Mittwoch, **27. Oktober 2004 um 16:00 Uhr** spricht:

Prof. Dr. Gerard Meijer

Fritz-Haber-Institut der Max-Planck-Gesellschaft Berlin

“Manipulation of molecules with electric fields”

Getting full control over both the internal and external degrees of freedom of molecules has been an important goal in molecular physics during the last decades. This control is essential in the presently very active field of Cold Molecules. Trapped samples of neutral molecules have been created by means of buffer gas cooling in a magnetic trap, by using deceleration of a molecular beam in combination with an electrostatic trap, and by pairing cold atoms to form molecules in optical or magnetic traps. Recently, spectacular progress has been made with association of ultra-cold atoms assisted by magnetically induced Feshbach resonances, resulting in the first molecular Bose-Einstein condensates. In the field of Cold Molecules there is a particular interest in cold dipolar molecules which stems from the presence of the anisotropic, long-range dipole-dipole interaction in these samples, which is predicted to lead to interesting physics and novel applications. In this presentation I will give an overview of the various experiments that we have performed during the last few years to explore the possibilities of manipulating neutral polar molecules with electric fields.

Ort: Max-Born-Saal, MBI, Max-Born-Str. 2a

Interessenten sind herzlich eingeladen.

Prof. Dr. I.-V. Hertel