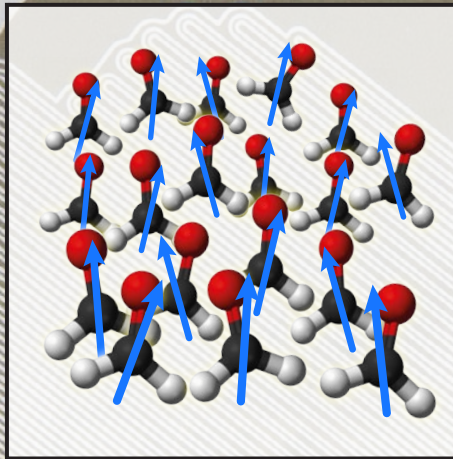
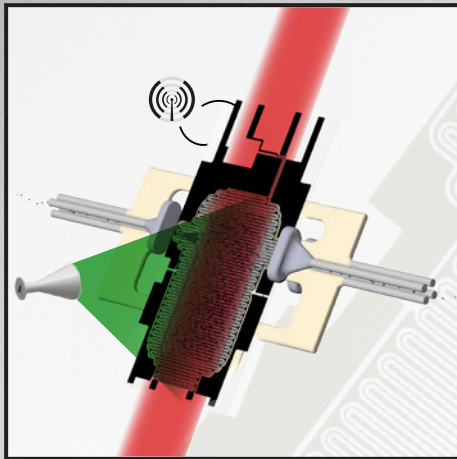


Max Planck Institute of Quantum Optics  
Quantum Dynamics Division

# PhD Position Doktorandenstelle

(Experimental Physics / Quantum Optics)



## Cold polar molecules

Due to their strong permanent electric dipole moment and the many internal degrees of freedom, polar molecules cooled to ultracold temperatures offer an exciting new system to investigate novel quantum physical phenomena. Our expertise lies in polyatomic molecules which are buffer-gas cooled, decelerated by a centrifuge, (quasi-) permanently trapped in electrostatic fields and cooled using a Sisyphus effect.

You will work on advancing one of the most promising techniques to manipulate chemically stable molecules at millikelvin temperatures and below. This involves understanding the quantum mechanical structure of molecules, studying the still unexplored collision properties of ultracold molecules, and leading the way towards controlled chemistry, molecular BECs or quantum information with molecules.

Contact:

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