

## Institutsseminar

### **Exploring Chemical Processes in Space: Gas Phase Reactions and their Role in Astrochemistry**

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Gas-phase reactions play a fundamental role in space. They are involved in star formation, the interstellar medium (ISM) and planetary atmospheres. However, studying these reactions is challenging due to the extreme conditions involved, such as low temperatures (around 10 K in molecular clouds), low densities and intense radiation fields. In our group, we are interested in understanding inelastic collisions between small molecules and partners such as H, He and H<sub>2</sub>. Using computational simulations, we analyse the mechanisms of these collisions, which are crucial for interpreting astronomical observations. This talk will explore the chemistry of gas-phase processes and present our latest results.

**HS G**

**16:30 Uhr**

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