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FLASH HALL (28c), Seminar Room

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### On the dynamics of chemical reaction of negative ions

Ion-molecule reactions have been studied for many years owing to their importance in chemistry, atmospheric science, plasma and astrophysics. To study their dynamics we have developed a crossed beam imaging spectrometer for ion-molecule reactions. With this approach we have been able to resolve several distinct reaction mechanisms for anion-molecule nucleophilic substitution reactions. Recently we have studied adiabatic alignment of the neutral reactant molecules as a first step towards stereodynamic investigations. Furthermore, we have begun to investigate reactions of water cluster ions to unravel the influence of micro-solvation.

