chemisch physikalische gesellschaft

universität wien

Gegründet im Jahre 1869 von H. Hlasiwetz, J. Loschmidt, J. Petzval und J. Stefan

EINLADUNG

zum Vortrag

von

Univ.-Prof. Dr. Roland Wester

Institut für Ionenphysik und Angewandte Physik, Universität Innsbruck

Cold and controlled molecular collisions: a bridge from quantum physics to organic chemistry

am

Dienstag, 21. Oktober 2014, um 17:30 Uhr

Ort: Lise-Meitner-Hörsaal, Fakultät für Physik, Universität Wien,
1090 Wien, Strudlhofgasse 4 / Boltzmanngasse 5, 1. Stock

Barrierefreier Zugang: Boltzmanngasse 5, Lift, 3. Stock rechts über den Gang zum Hintereingang des Hörsaals

Abstract:

The fundamental dynamics of molecular collisions and reactions have challenged researchers for many years. This continues to drive the development of more informative experiments and more precise theoretical descriptions in physical chemistry and chemical physics. I will discuss two collision processes that we have studied with different techniques in my group. The first one is a fully quantum state-resolved inelastic collision, which we have achieved to study in a low-temperature ion trap. The second one is the elementary nucleophilic substitution reaction, for which we have been able to image and analyse several different reaction mechanisms.