

Abstract Submitted
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Ion-Molecule Collisions - Fragmentation Products and Cross Sections JOHN R. SABIN, University of Florida and University of Southern Denmark, REMIGIO CABRERA-TRUJILLO, Kansas State University, ERIK DEUMENS, University of Florida, YNGVE ÖHRN, University of Florida — In this presentation, I will introduce a theoretical scheme for studying the interaction of fast ions, electrons, and photons with molecules. Although the molecules under consideration are not, perhaps, of the size to make a biologist (or even a biochemist!) feel quite at home, they are the beginnings of a theoretical program to study the details of the interactions of particles with molecules of biological significance. The examples, such as the fragmentation cross section for various channels for protons impinging on ethane, will be illustrative of what we hope we will be able to do with real biomolecules in time. In particular, I will look at collision and fragmentation cross sections, which are necessary for the understanding of the details of ion-molecule processes. The details of the formalism will be minimal.

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