



Bethany Christine Jochim

Graduate Institution: Kansas State University

Graduate Discipline: Atomic, Molecular, and Optical Physics

Hometown: Pierre, SD

Relevant SC Research: Basic Energy Sciences

Research Interest:

I am interested in studying the interactions of intense ultrafast laser pulses with molecular ions experimentally. In these experiments, we cross a molecular ion beam with a pulsed laser beam and use a coincidence three-dimensional momentum imaging technique to measure the resulting fragments. We then use these measurements to understand the underlying dynamics of the laser-induced dissociation.

Through the ongoing collaboration of

my undergraduate institution and my graduate institution, I am also involved in experiments focusing on adaptive femtosecond control of fragmentation and bond rearrangement of molecules.

About Me:

I am entering my second year of graduate studies in physics at Kansas State University, where I conduct research in Prof. Itzik Ben-Itzhak's group. At the recent meeting of the Division of Atomic, Molecular, and Optical Physics

(DAMOP), as one of the 2011 recipients of the APS Leroy Apker Award, I presented the results of an experimental and theoretical study of strong-field dissociation of NO_2^+ , which I began as an REU student at Kansas State. My long-term goal is to work in a career combining both teaching and research duties, making a special effort to get undergraduates involved in research. When I'm not doing physics, I enjoy playing piano and trumpet and studying classical languages.



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