

Abstract Submitted  
for the MAR15 Meeting of  
The American Physical Society

**Solving the Time Dependent Schroedinger Equation using the FEDVR/SIL Method** BARRY SCHNEIDER, NIST — In this talk we will explore how the finite element discrete variational representation coupled to the short iterative Lanczos method has enabled our group to make substantial progress in understanding the single and double ionization of atoms and simple diatomic molecules in short, intense electromagnetic fields. Particular attention will be paid to new time-dependent propagation techniques to shorten the computational times.

Barry Schneider  
NIST

Date submitted: 14 Nov 2014

Electronic form version 1.4