

Abstract Submitted  
for the DAMOP06 Meeting of  
The American Physical Society

**Signatures of multiphoton and tunneling ionization in the electron-momentum distributions of atoms by intense few-cycle laser pulses** MARLENE WICKENHAUSER, XIAO MIN TONG, CHII DONG LIN, Phys. Dept. Kansas State University — We present angle-resolved electron momentum distributions for above-threshold ionization (ATI) of argon in an intense, linearly polarized laser pulse. Our results were obtained by solving the time-dependent Schrodinger equation and by using a model based on the strong field approximation (SFA). Many features of the spectra such as ATI peaks, their substructure in the energy domain and their dominant angular momentum can be understood within the familiar SFA model.

Marlene Wickenhauser  
Phys. Dept. Kansas State University

Date submitted: 27 Jan 2006

Electronic form version 1.4