Abstract Submitted
for the DAMOP13 Meeting of
The American Physical Society

Attosecond relative time delays in streaked photoemission from Mg (0001) surfaces[1] Q. LIAO, U. THUMM, Physics Department, Kansas State University — We analyze attosecond relative time delays in the photoemission from conduction band (CB) and core levels (CL) of metal surfaces within a quantum-mechanical model. The relative delay between CB and CL photoelectrons is found to be sensitive to the electron mean free path and the screening of the NIR streaking field inside the solid. Our numerical results reproduce a recent attosecond-streaking experiment with an Mg(0001) surface [S. Neppl *et al.*, Phys. Rev. Lett. **109**, 087401 (2012)], which reveals no relative streaking time delay between CB and CL electrons.

[1]Supported by the US NSF and DOE.

Uwe Thumm
Physics Department, Kansas State University

Date submitted: 25 Jan 2013 Electronic form version 1.4