

Abstract Submitted  
for the DAMOP18 Meeting of  
The American Physical Society

**Molecular and Pulse Symmetry Effects in Bichromatic Circularly Polarized High Order Harmonic Generation** .<sup>1</sup> ANDRE BANDRAUK, KAI JUN YUAN, Universite de Sherbrooke — We present from quantum numerical simulations molecular and pulse symmetry effects in circularly polarized HHG,,high order harmonic generation,,with counter-rotating bichromatic circularly polarized intense laser pulses.We discuss how electron recollision trajectories[1] influence the harmonic polarizations from a time-frequency analysis of the harmonics.It is found that molecular orientation dependent ionization rates determine the harmonic polarizations especially below 2 Up energies due to Coulomb potentials.Coriolis effects in a rotating frame ,predicted as early as 1995[2],are shown to also influence HHG polarizations.Electron recollision trajectories illustrate the effects of relative molecule-pulse electric field symmetries on efficiencies and polarizations of bicircular bichromatic HHG [1]AD Bandrauk,F Mauger,KJ Yuan,J Phys B 49,23LT01(2016);[2]T Zuo,AD Bandrauk,J Nonlin Opt.Phys Mat 04,533(1995);AD Bandrauk,HZ Lu,Phys Rev A 68,043408(2003)..

<sup>1</sup>NSERC,FQRNT

Andre Bandrauk  
Univer5site de Sherbrooke

Date submitted: 19 Jan 2018

Electronic form version 1.4