Abstract Submitted
for the DAMOP19 Meeting of
The American Physical Society

Control of Harmonic Generation by the Time Delay Between Two-Color, Bicircular Few-Cycle Mid-IR Laser Pulses[1] ANTHONY F. STARACE, University of Nebraska - Lincoln, USA, M.V. FROLOV, N.L. MANAKOV, A.A. MININA, Voronezh State University, Russia, N.V. VVEDENSKII, A.A. SILAEV, Voronezh State University & Institute of Applied Physics, Nizhny Novgorod, Russia, M.YU. IVANOV, Max-Born Institute, Germany, & Imperial College London, UK — We study control of high-order harmonic generation (HHG) driven by time-delayed, few-cycle ω and 2ω counter-rotating mid-IR pulses [1]. Our numerical and analytical study shows that the time delay between the two-color pulses allows control of the harmonic positions, both those allowed by angular momentum conservation and those seemingly forbidden by it. Moreover, the helicity of any particular harmonic is tunable from left- to right-circular without changing the driving pulse helicity. The highest HHG yield occurs for a time delay comparable to the fundamental period $T = 2\pi/\omega$.
[1] M.V. Frolov *et al.*, Phys.Rev.Lett. **120**, 263203 (2018).

[1]Work supported by Ministry of Education & Science of the Russian Federation Grant No. 3.1659.2017/4.6, Russian Science Foundation Grant No. 18-12-00476 (numerical calculations), and U.S. NSF Grant No. PHY-1505492 (A.F.S.). M.I. acknowledges the DFG QUTIF grant.

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Date submitted: 31 Jan 2019 Electronic form version 1.4