Abstract Submitted
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Nondipole effects in double photoionization of He at 450 eV excess energy[1] ANDREI Y. ISTOMIN, ANTHONY F. STARACE, University of Nebraska-Lincoln, N.L. MANAKOV, A.V. MEREMIANIN, Voronezh State University, Russia, A.S. KHEIFETS, Australian National University, Canberra, Australia, IGOR BRAY, Murdoch University, Perth, Australia — We calculate photoelectron angular distributions for double photoionization of He at an excess energy of 450 eV including nondipole effects [1]. We employ our model-independent representations [2] for the dipole and quadrupole transition amplitudes and use the convergent close-coupling (CCC) approach [3] to evaluate them[2]. Our nondipole results for the triply-differential cross section are shown to have improved agreement (as compared to the dipole approximation results) with recent experiments using linearly polarized light [4] for a number of kinematical configurations. [1] A.Y. Istomin et al., J. Phys. B **39**, L35 (2006). [2] A.Y. Istomin et al., Phys. Rev. Lett. **92**, 063002 (2004). [3] A.S. Kheifets and I. Bray, Phys. Rev. A **57**, 2590 (1998). [4] A. Knapp et al., J. Phys. B **38**, 615 (2005).

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