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Imaging of graphene ribbons and carbon nanotubes by strong field ionization AGNIESZKA JARON-BECKER, HENOK GHEBRECHRISTOS, MIN SEOK CHOI, JILA and Department of Physics, University of Colorado, 440 UCB, Boulder, CO 80309-0440 — One of the goals of strong field physics is imaging the structure and dynamics of quantum systems. We present numerical results and a theoretical analysis of ionization dependence on the orientation of carbon nanotubes and graphene ribbons with respect to the polarization of the electric field of a laser. Properties of considered finite systems like e.g. the radius and length of carbon nanotubes as well as impurities for graphene ribbons can be related to qualitative and quantitative changes in the orientation dependent ionization signal.

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