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Ionization Dynamics in Intense Bicircular Laser Fields JAN CHALOUPKA, University of Northern Colorado — The strong-field ionization of helium in two-color, circularly polarized intense laser fields is analyzed with a classical ensemble approach. This *ab initio* technique models the interaction of an ultrashort laser pulse with a completely classical model atom, giving impressive physical and intuitive insight into the dynamics of the ionization process. It is found that counterrotating fields produce significant nonsequential double-ion yield through rescattering and drive novel ionization dynamics. The pathways to double ionization can be modified by altering the relative intensities of the two colors, allowing for unique control of strong-field processes that is not possible with linearly polarized fields. An enhancement in the single ionization yield is also observed, providing a unique and clear signature of rescattering in the single ionization process.

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