

Abstract Submitted
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New Apparatus to Study Fast Atomic Recombination in Ultracold Plasma MICHAEL LIM, LUCAS WILLIS, Dept. of Physics & Astronomy, Rowan University — We have constructed an apparatus to study the early evolution (0-1000 ns) of ultracold plasma, produced by photo-ionization of rubidium atoms in a magneto-optical trap. We report on progress toward measuring recombined atomic populations in ultracold plasma using ramped field ionization. The new setup features fast deflector plates to avoid saturation of the multi-channel plate detector, as well as close atmospheric access to the ultra-high vacuum interaction region.

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