

Abstract Submitted
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Masked Ionization Experiments in Ultracold Neutral Plasmas

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— Evidence of shock and ion acoustic waves have been seen in shadow mask ionized Ultracold Neutral Plasmas. By spatially modulating the intensity of the ionizing beam, the typical spherical Gaussian symmetry is broken. This controllable geometry along with spatial-temporal fluorescence spectroscopy has revealed density front collisions and ion velocity oscillations. These results and their interplay with the effects of strong coupling will be shown.

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