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Numerical simulations of wave compression in plasma¹ VASILY GEYKO, NATHANIEL FISCH, Princeton University — When there are waves embedded in plasma, a number of curious wave phenomena arise in plasma undergoing compression. These phenomena include the amplification or damping of the waves or the transfer of wave energy or momentum to the plasma constituents. We have made preliminary studies of these compression effects through particle-in-cell simulations, both 1D and 2D, in both magnetized and unmagnetized plasmas.

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