Effects of nonlinear left-hand circularly polarized waves LUIS GOMBEROFF — We study the effect of nonlinear left-hand polarized waves supported by a proton beam on the linear circularly polarized instabilities driven by the same beam. We show that the nonlinear wave can either stabilize or destabilize the linear instabilities. The effects depend on the amplitude of the nonlinear wave and on the temperature of the system. We also show that purely electrostatic ion-acoustic like waves, can be destabilized by the large amplitude wave. The latter instabilities do not occur in the absence of the nonlinear waves.

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