

Abstract Submitted  
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**Non-ideal Effects on Drift Wave Instabilities in Magnetized Inhomogeneous Dusty Plasma** ENRIQUE CASTRO, JULIO PUERTA, PABLO MARTIN, Universidad Simon Bolivar, Depto. Fisica, Apdo. 89000, Caracas, Venezuela — Low-frequency drift wave instabilities, for perpendicular propagation, on magnetized inhomogeneous dusty plasmas are analyzed, considering a temperature gradient and using a kinetic treatment. The growth rate of the instabilities has been determined by using a four poles two-point quasi-rational approximation for the plasma dispersion function. For large grain radius or high particle densities, the non-ideal effects in the state equation can be considered and described by the Ree and Hoover Pade's type state equation. The contribution of non-ideal effects is analyzed for different plasma parameters such as temperature ratios, particle drift velocities, dust charge and mass values. Fluctuating charge effects are not considered in this work. Our results are compared with those where ideal contributions are considered.

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