

## P1.3012 Dust ion-cyclotron surface waves in semi-bounded $(r, q)$ distribution dusty plasmas

*Monday, 8 July 2019 14:00 (2 hours)*

See the full abstract here:

<http://ocs.ciemat.es/EPS2019ABS/pdf/P1.3012.pdf>

The effects of magnetic field strength, ion mass, and non-thermal character on the dispersion properties of dust ion-cyclotron surface wave are investigated in a semi-bounded  $(r, q)$  distribution dusty plasma. In the limit of short wave number, the dispersion relation is derived by employing the specular reflection boundary condition and the effective screening distance in  $(r, q)$  distribution dusty plasma. It is found that the stronger magnetic field strength suppresses the wave speed, but the heavier ions will enhance the wave propagation. The result would reduce to the case of Maxwellian plasma for  $r \rightarrow 0$  and  $q \rightarrow \infty$ .

**pppo**

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**Session Classification:** Poster P1

**Track Classification:** LTPD