Contribution ID: **92** Type: **Oral Presentation**

Nonlinear ion-acoustic and electron-acoustic waves in multi-ion space plasmas

Wednesday, 10 July 2013 16:00 (20 minutes)

Abstract content
   (Max 300 words)

Large amplitude ion-acoustic and electron-acoustic solitons
will be investigated for a four-component plasma model composed of cool and hot electrons and cool and hot ions. The effect of retaining inertial effects for all species (treating all species as adiabatic) as opposed to neglecting the inertia of the hot components (assuming Boltzmann distributions for the hot species) will be explored. Considering very broad regions in parameter space, the focus of the study will be to investigate why upper Mach number limitations arise for
ion-acoustic and electron-acoustic solitons.

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No

Would you like to <br> submit a short paper <br> for the Conference
 Proceedings (Yes / No)?

No

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