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Solitary Waves in a Magnetized Plasma with Two Temperature Electrons

Thursday, 12 July 2012 12:00 (20 minutes)

Abstract content
   (Max 300 words)

A finite amplitude theory for non-linear ion-acoustic solitary waves in magnetized plasma is studied with cold ions fluid and two distinct groups of Boltzmann electrons using Sagdeev pseudpotential technique. It is found both analytically and numerically, the conditions under which the solitary waves can exist. We have shown the existence of solitary waves with only a negative potential. The present investigation can be of relevance to low frequency solitary structures observed in various space plasma environments.

Apply to be
 consider for a student
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yes

Level for award
 (Hons, MSc,
   PhD)?

PhD

Main supervisor (name and email)
and his / her institution

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no

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