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Type: **Oral Presentation**

## Solitary Waves in a Magnetized Plasma with Two Temperature Electrons

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

### Abstract content <br> &nbsp; (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 pseudopotential 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<br> consider for a student <br> &nbsp; award (Yes / No)?

yes

### Level for award<br>&nbsp;(Hons, MSc, <br> &nbsp; PhD)?

PhD

### Main supervisor (name and email)<br>and his / her institution

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

no

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