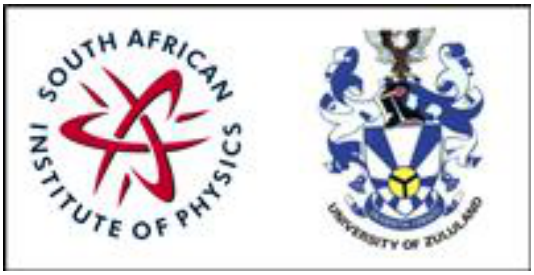

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Simulations of ion acoustic waves in Saturn's magnetosphere

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

Abstract content
   (Max 300 words)

Existence domains and characteristics of ion acoustic waves are studied in a two-temperature electron, adiabatic ions and low density ion plasma with the electron components being kappa-distributed. Such an environment has been found in Saturn's magnetosphere. Using a Particle-in-Cell (PIC) simulation, the evolution of the spatial electric field is tracked during the entire simulation, after which a dispersion diagram is constructed to study the dispersion characteristics of the ion acoustic mode.

Apply to be
 considered for a student
   award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
   PhD)?

PhD

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

Andrew Collier, collierab@gmail.com, SANSA Space Science

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

Yes

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