Electron density measurement using resonance hairpin and Langmuir Probe in an ion acoustic wave experimental setup

Abstract

An ion-acoustic wave launched in a magnetized plasma setup creates a density perturbation. For the detection of the wave, a standard Langmuir probe will be developed and implemented in the setup. The electron density perturbation will be compared with the resonance hairpin probe for a range of plasma parameters.

Academic Project Requirements:

1) Required No. of student(s) for academic project: 1

2) Name of course with branch/discipline: B.Sc. Physics

3) Academic Project duration:

(a) Total academic project duration: 24 Weeks
(b) Student's presence at IPR for academic project work: 4 Full working Days per week

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