Abstract Submitted
for the GEC09 Meeting of
The American Physical Society

Some Basic Experiments on Dusty Plasma with Negative Hydrogen Ions Generation[1] BIPUL KUMAR SAIKIA[2], S.S. KAUSIK, B. KAKATI, Centre of Plasma Physics, IPR, Nazirakhat, Tepesia, Sonapur, Kamrup-782402, Assam India, M. BANDYOPADHYAY, Institute for Plasma Research, Bhat, Gandhinagar, Gujarat-383428, India — Some parametric studies like the effect of discharge current, plasma temperature and working pressure on the charging of dust grains in hot cathode discharge plasma will be presented. The designing concepts of a novel experiment to produce negative hydrogen ions from Cesium coated dust particles and related preliminary studies with dust particles in hydrogen plasma will be presented. The aim of producing negative hydrogen ions is to devise the possibility of using such negative ions in Neutral Beam Injection Heating of Tokamak plasma.
Refs: S.S. Kausik, M.Chakraborty, P. Dutta, M. Kakati and B.K. Saikia, *Phys. Lett. A* 372, 860 (2008)

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Date submitted: 15 Jun 2009 Electronic form version 1.4