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Characteristics of Ion Acoustic Wave in Multi Cusp Plasma Device. MEENAKSHEE SHARMA, A. D. PATEL, NARAYAN RAMASUBRAMANIAN, Y. C. SAXENA, P. K. CHATTOPADHYA, Institute for Plasma Research — In Multi-cusp Plasma Device (MPD) six electromagnets on the circumference of the device, have been used for the multi-cusp magnetic field profile production. This geometry has the centre of radius of curvature outside the confined plasma that provides magneto-hydrodynamic stability to the plasma. Such plasmas are very quiescent with density fluctuations $\leq 0.1\%$. In the quiescent background, any external perturbation to plasma either in ion or electron regime can be examined better. Hence in this paper the experimental study of potential perturbation propagated as ion-acoustic wave (IAW) and characteristics of IAW interaction in MPD will be presented.

Meenakshee Sharma
Institute for Plasma Research

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