

RELATIONSHIP OF ION BERNSTEIN WAVES  
INDUCED BY HIGH-POWER HF FIELDS  
TO PLASMA PARAMETERS  
ON AN URAGAN-3M  
TORSATRON

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S u m m a r y

On a U-3M torsatron at the RF power heating, narrow spectral band plasma density oscillations were observed near the harmonics of ion cyclotron frequencies. The estimation of wave numbers showed that the condition for the excitation of short wavelength ion Bernstein modes is fulfilled. The observed correlation of the ion temperature with the spectral width of harmonics possibly illustrates the role of excited oscillations for the ion heating process.