

Abstract Submitted  
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**Plasma Oscillations in the Presence of Radio Frequency Waves<sup>1</sup>**

S. SEN, Lancaster University — The effect of the radio-frequency (RF) waves on the low-frequency plasma oscillations is investigated. It is found that the crucial factor whether the plasma oscillations will be quenched or excited depends on the gradient of the RF power deposition profiles from the mode rational surfaces where the RF power is deposited. If the gradient is positive then the plasma oscillations are excited whereas for the negative value of the gradient the oscillations are suppressed. This result is interesting for the plasma oscillations control in a low temperature plasma device.

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