Effect of Radio Frequency Waves on Plasma Instabilities

S SEN, Jarvis Christian College, TX; College of William Mary, VA and National Institute of Aerospace/NASA, VA — The effect of Radio Frequency waves on low frequency plasma instabilities and turbulence is studied. It is shown that the ponderomotive force can stabilize or destabilize instabilities depending on the power deposition profile and no RF induced flow generation hypothesis is required. Its possible consequence on space and fusion plasma will be discussed.

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