Effect of RF Waves on Ion Temperature Gradient Modes\textsuperscript{1} S SEN, College of William Mary, VA; National Institute of Aeroospace, VA and Bowie State University, MD, J MARTINELL, Instituto de Ciencias Nucleares - UNAM, Mexico, K IMADERA, Y KISHIMOTO, Kyoto University, Japan — The ion-temperature-driven modes are studied in the presence of radio frequency waves by the use of the Gyro-Kinetic simulation Code and ASTRA Code. It is shown that the radio frequency waves through the ponderomotive force can stabilize the ion-temperature-gradient instabilities and contrary to the usual belief no radio frequency wave-induced flow generation hypothesis is required. This might be a major way to create a transport barrier in the fusion energy generation.

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