



IL0307017

Heat Flux Inhibition by Whistlers: Experimental Confirmation

David Eichler

Ben Gurion University, Beer Sheva

Heat flux in weakly magnetized collisionless plasma is, according to theoretical predictions, limited by whistler turbulence that is generated by heat flux instabilities near threshold. Observations of solar wind electrons by Gary and coworkers appear to confirm the limit on heat flux as being roughly the product of the magnetic energy density and the electron thermal velocity, in agreement with prediction ((Pistinner and Eichler 1998).