Alfven Waves in the Magnetosphere of Jupiter

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Alfven waves play important roles in the magnetosphere of Jupiter, just as they do at Earth. The Alfvenic interaction of the Galilean satellites, particularly Io, couple the moons to Jupiter. Similarly, alfven waves couple the outer magnetosphere to the polar auroral regions. This talk will review our understanding alfven wave generation, propagation and dissipation in the magnetosphere of Jupiter and present prospects of future observations by a Jupiter polar mission.

