Geophysical Research Abstracts Vol. 18, EGU2016-5617, 2016 EGU General Assembly 2016 © Author(s) 2016. CC Attribution 3.0 License.



Theory and simulation of turbulent magnetic reconnection

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For some time it has been conjectured that the rate of magnetic reconnection can be enhanced in the presence of plasma turbulence. We tested this conjecture by describing turbulence applying different models of the turbulence evolution. We could show that the effect of turbulence depends on ist regime controlled by parameters chracterizing the mode of turbulence.