



Magnetic reconnection in turbulent space plasmas: null-points or pinches?

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We report particle-in-cell simulations of magnetic reconnection in the configuration containing both null-points and pinches. All indicators suggest that secondary magnetic reconnection driven by kinking of the pinches plays a dominant role in the energetics of the system. While there is no substantial energy dissipation in the vicinity of X-type null-points. Such reconnection results in tremendous release of magnetic energy, generation of suprathermal particles and waves. Similar scenario may take place in turbulent space plasmas, where current channels and twisted magnetic fields are detected.