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Similarities and differences between magnetic reconnection and current disruption

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Both terms, magnetic reconnection and current disruption, have been used in the literature to describe space plasma processes that convert stored magnetic field energy to particle energy. There is a general presumption that current disruption is just one aspect or consequence of magnetic reconnection. In this presentation, we examine similarities and differences between magnetic reconnection and current disruption. Particle simulation of current disruption will be used to illustrate some major differences between these two phenomena.