

***Explosive tearing mode reconnection in relativistic plasmas:  
application to the Crab flares***

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We investigate the possible role of Tearing mode in driving a fast magnetic reconnection process in relativistic plasmas. In particular, our resistive relativistic magnetohydrodynamic simulations of double current sheet system show an explosive phase associated with the nonlinear evolution of the magnetic islands. We discuss the consequences of such explosive reconnection dynamics to explain the MeV flares observed in the Crab pulsar nebula.