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# Particle Acceleration in Collapsing Magnetic Fields

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Magnetic reconnection in the vicinity of magnetized bodies, such as the sun, earth, or other planets, typically leads to the formation of shortened flux tubes, which collapse towards the magnetized body, while another portion of reconnected fields may become ejected as a plasmoid or flux rope. The collapsing magnetic field is associated with a localized electric field, which can provide a mechanism for the acceleration of suprathermal charged particles. We use the fields of an MHD simulation of reconnection in Earth's magnetotail, causing field collapse and propagating dipolarization fronts, to study the acceleration of test particles. We identify source regions, acceleration mechanisms, temporal, spatial, and pitch angle variations of energetic particle fluxes.