



Particle acceleration at a reconnecting magnetic separator

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We present first results of test particle orbit calculations in a time-dependent electro-magnetic field configuration which models separator reconnection in three dimensions. The test particle orbits are calculated using the relativistic guiding-centre approximation. The test particles are accelerated to high kinetic energies by the parallel electric field generically associated with three-dimensional magnetic reconnection, with the final energy depending on the choice of model parameters. We will discuss how the test-particle orbits and the energy gain depend on the initial conditions, and how observations (for example, of solar flares) may be used to constrain our model parameters.