



## **Electron dynamics in high beta, large shear, intermediate guide field reconnection**

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We present Magnetospheric Multiscale (MMS) observations of an intermediate guide field current sheet with finite normal magnetic field and width comparable to electron spatial scales, embedded within a magnetosheath boundary layer with thickness of several ion-scales. The current sheet has a bifurcated structure and features consistent with magnetic reconnection close to the electron diffusion region, such as strong out-of-plane currents, Hall electric and magnetic fields, and non-gyrotropic electron distributions. Using test particles, we show that electrons originating from the side with higher magnetic field curvature (where the Hall magnetic field cancel most of the guide field) are scattered to perpendicular pitch angles while electrons from the side with smaller magnetic field curvature remain close to field aligned. We also observe depletions in the electron distribution that can be associated with an out-of-plane electric field and propose that this is the manifestation of demagnetized electrons affected by a reconnection electric field.