

Abstract Submitted
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Dynamic of Current Sheets and Their Associated Particle Energization HUI LI, FAN GUO, LANL, KIRIT MAKWANA, U. Chicago, XIAOCAN LI, U. Alabama and LANL — Large-scale numerical simulations have revealed the critical role of current sheets in regulating the energy conversion processes from fluid scale to kinetic scale. Recently, we have found that efficient particle acceleration can occur in association with these sheets as well. We will present fluid and particle-in-cell simulation results that show the dynamics of current sheets and particle acceleration processes. We discuss the implications of these studies for solar plasma heating and AGN jets/lobes.

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