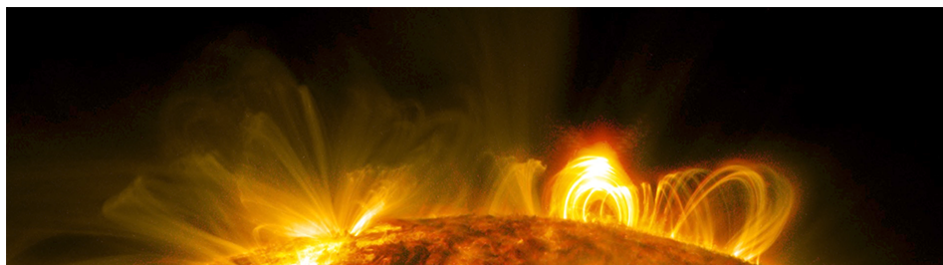


## Particle Acceleration in Solar Flares and the Plasma Universe – Deciphering its features under magnetic reconnection



Contribution ID: 14

Type: **Invited talk**

### Suprathermal electrons in Earth's magnetotail: What can they teach us about flare electron energization?

*Wednesday, 17 November 2021 10:45 (30 minutes)*

The large-scale magnetic configuration and plasma beta in solar flares are similar to those in the magnetotail during reconnection. Studies of suprathermal electrons in the magnetotail may thus shed light on suprathermal electron production during flares. We will discuss statistical and case studies of MMS magnetotail measurements. In particular, we will assess: (1) whether primary electron energization occurs at the reconnection X-line or downstream, and (2) roles of magnetic field configurations and fluctuations (including magnetic islands) in energizing electrons to suprathermal energies.

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**Session Classification:** Day 3 / Session 2