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Multi-wavelength observations and modelling of solar energetic particles

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Solar energetic particles (SEPs) are highly relativistic, non-thermal particles, accelerated in/near the solar corona during transient solar phenomena. SEP electrons are believed to be mainly accelerated by magnetic reconnection occurring in solar flares. For these events, we may infer a lot about how and where these particles are accelerated and when they are released into the turbulent interplanetary medium by examining the electromagnetic radiation they produce during their propagation. In this talk we will discuss these remote-sensing observations of the Sun, how the transport of SEP electrons are modelled, and how we may use the SEP electron observations to mitigate possible harmful space weather events.

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No

Level for award
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No

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