

Project Details

ROSES ID: NNH10ZDA001N

Selection Year: 2011

Program Element: Focused Science Topic

Topic: Factors that Control the Highly Variable Intensity and Evolution of Solar Particle Events

Project Title:

Preconditioning of the interplanetary medium as responsible for large intense SEP events: Radial and longitudinal effects

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Summary:

We propose to study the factors that control both the highly variable intensity of solar energetic particle (SEP) events and the evolution of the SEP events as observed in the inner heliosphere. In particular, we will investigate both observationally and numerically how the preconditioning of the interplanetary (IP) medium determines the particle intensities observed at different locations in the inner heliosphere, paying special attention to those events that lead to the highest particle intensities and fluences observed throughout a solar cycle and those events that have been and will be observed from multiple heliospheric locations at radial distances R