

Working Group 1-3

Focus: the acceleration and transport of energetic particles and what we can learn about the relationship between SEP events, CMEs, and flares

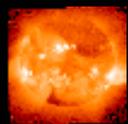
- magnetic field topology
- flare seed population
- shock formation

**B-field topology,
connectivity, ...**

where?

field orientation

flare particles

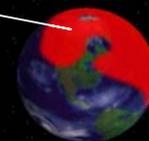


**flare
and/or
CME**

**Seed
popn**

ambient particles

how strong?



**Abundance ratios, composition,
spectra, timing, injection profile**

**Previous history of events
Multiple shocks
Multiple accelerations
Ambient medium characteristics**

Questions for Solar Community

- Shocks at 2-5 R_S
 - Where and how strong
- Magnetic Topology
 - connection to flare, interchange reconnection
- Pre-eruption history (campaign events)
- Blast waves
 - Diagnostics
 - How strong
 - Particle effects
- Relative Timing of Observables (campaign events)

Questions for the SEP Community

- Energy budget
 - particles, shock
- Injection Profiles
 - more examples, more techniques

Questions for Theorists

- Timing differences
 - parallel vs perpendicular shocks
- Blast wave acceleration
 - can it accelerate particles to significant energies
 - resulting measurables (spectra, flux)

Your Task if You Choose to Accept It

- Submit your top 3-5 questions for the other community
- Feed back for how to continue next year
- List of things that you are willing to investigate over the next year