

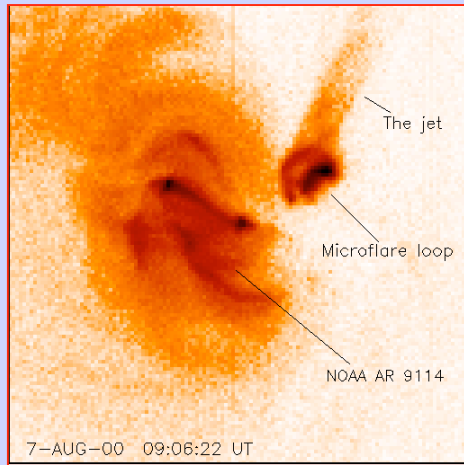
# Solar sources of impulsive SEPs

<http://sprg.ssl.berkeley.edu:80/RHESSI/iseps/>

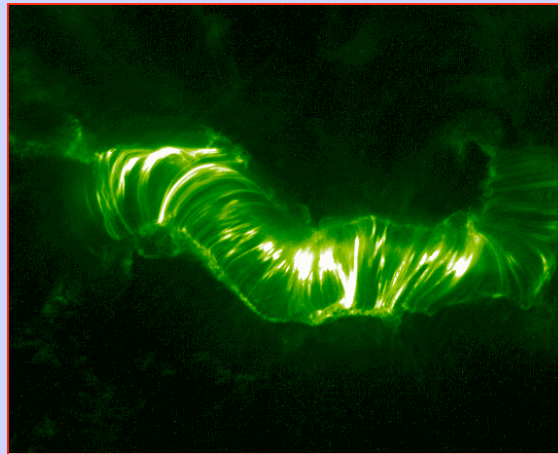
Special one-day seminar at SSL, Berkeley

Nov. 3, 2006 (09:00-15:00)

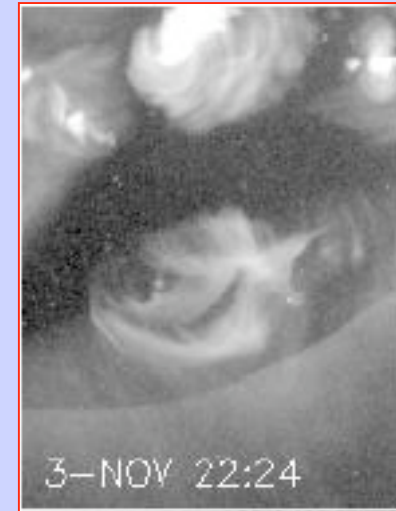
# Candidate Counterparts I



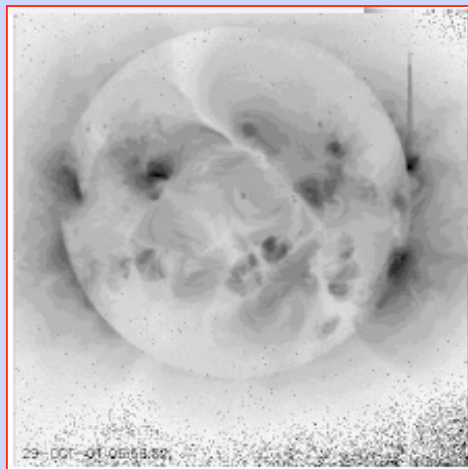
X-ray jet (EUV, WL?)



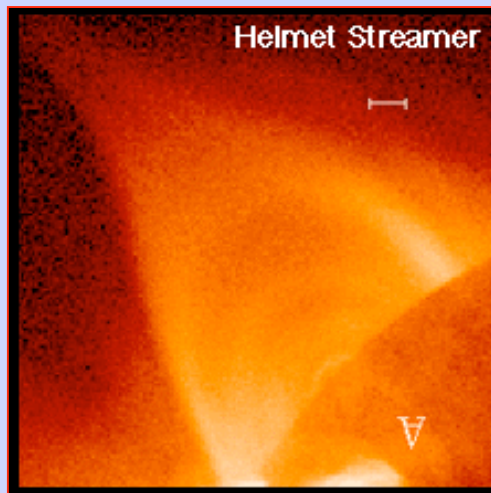
Flare



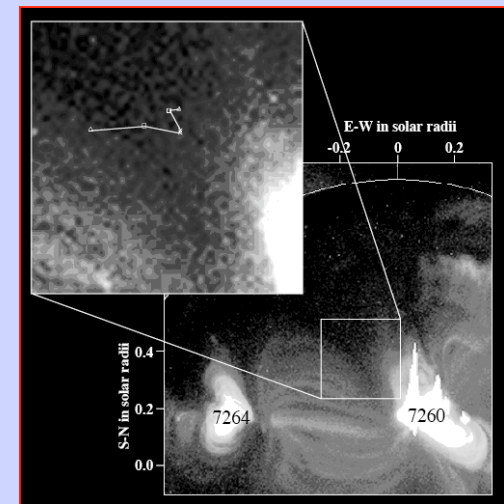
Coronal hole



Skinny coronal hole

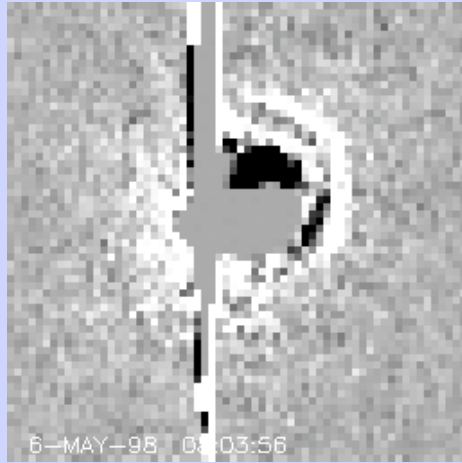


Helmet streamer

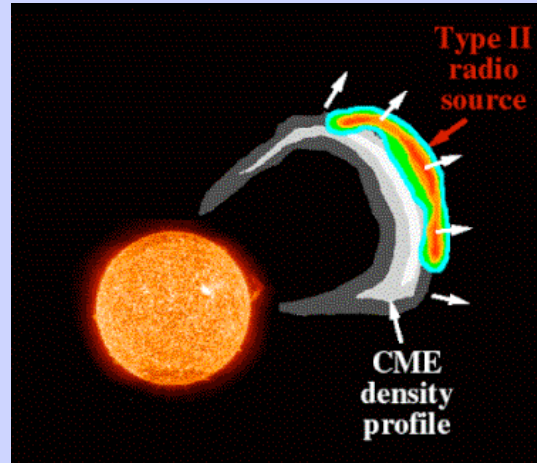


Spike burst / IIIs

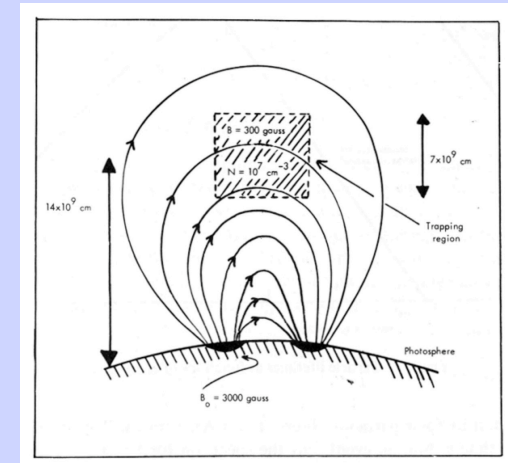
# Candidate Counterparts II



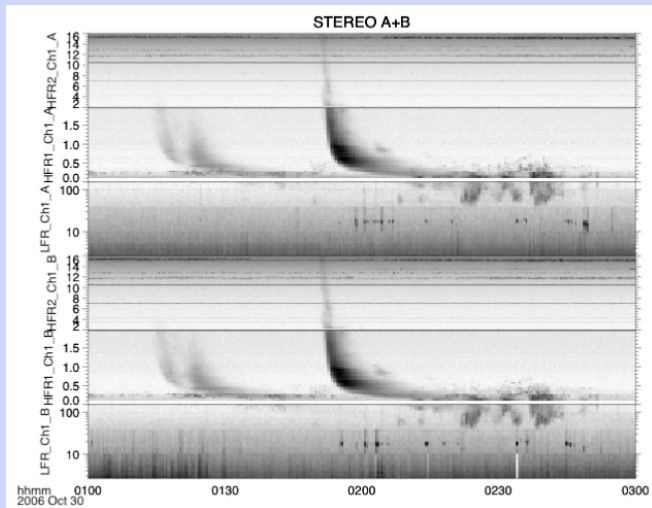
Flare shock



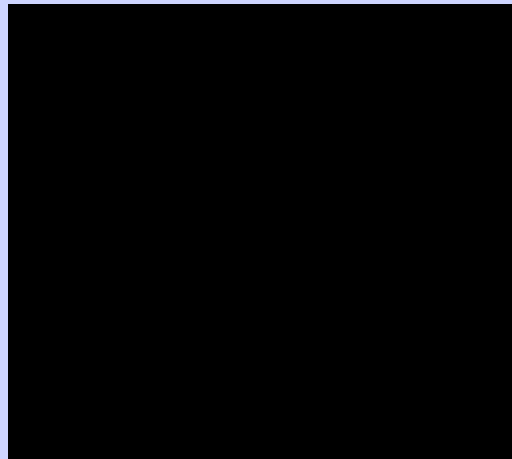
CME-driven shock



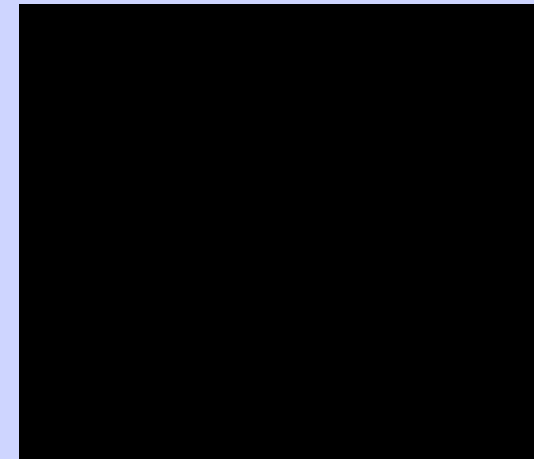
Previously owned particles



Type III burst



Post-CME turbulence



High coronal flare

## What are the problems?

- What thing accelerates the SEPs?
- How is the chemical signature imposed (elemental, isotopic, ionization)?
- What is the physics of the acceleration?
- What causes the observed delays?
- Does the problem of magnetic connectivity require an extended source region?
- Are there multiple types of counterpart for the impulsive SEPs?