### What I'd like you to know about our Solar Instrumentation

Dr. Jonathan Cirtain Heliophysics Team Lead, MSFC Hinode Project Scientist

- The Solar Ultraviolet Magnetograph Instrument (SUMI)
- The High resolution Coronal Imager (Hi-C)
- The Chromospheric Lyman-Alpha SpectroPolarim (CLASP)
- The Marshall Grazing Incidence X-ray Spectrogra (MaGIXS)
- The Solar Wind Electron Alphas and Proton (SWE suite for Solar Probe +



8 channels

- 1 image in each channel 20 seconds.
- Data collected 24/7
- Spatial resolution of ~100

QuickTime<sup>™</sup> and a YUV420 codec decompressor are needed to see this picture.

> QuickTime™ and a Cinepak decompressor are needed to see this picture.

- The background images are from AIA (30.4 nm) and the foreground images are from *Hinode*/SOT (Ca II)
- AIA images are ~1000km resolution
- SOT images are ~150 km resolution
- Cadence is basically the same between the two instruments

QuickTime™ and a H.264 decompressor are needed to see this picture.



## t results:



Image on right is the AIA/SDO the day of launch.

Box indicates the selected poi of view for Hi-C.

QuickTime™ and a H.264 decompressor are needed to see this picture.

# the telescope MTF

QuickTime<sup>™</sup> and a PNG decompressor are needed to see this picture.

#### loop braiding

First postulated by Parker in a series of papers in 1977, braiding is a potential storage mechanism for energy in the solar atmosphere.





QuickTime™ and a H.264 decompressor are needed to see this picture.

#### x-point reconnection!

QuickTime<sup>™</sup> and a H.264 decompressor are needed to see this picture. Questions?