#### Huntsville Alabama L5 Society (HAL5)

### Your local chapter of the National Space Society Presents



# **Our Earth's Weird Weather:**

Space Lightning, Gamma Ray Bursts, and Anti-Matter Particle Beams

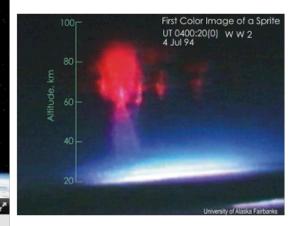
HAL5



A sprite glows red (inset) in this image captured by astronauts on the international Space Station on April 30, 2012. Credit: Image Science & Analysis Laboratory, NASA Johnson Space Center



NASA's Fermi Gamma-ray Space Telescope has detected beams of antimatter launched by thunderstorms. Acting like enormous particle accelerators, the storms can emit gamma-ray flashes, called TGFs, and high-energy electrons and positrons. Scientists now think that most TGFs produce particle beams and antimatter. Credit: NASA's Goddard Space Filght Center



# A FREE Public Lecture by Dr. Linda Habash Krause Solar/Solar-Terrestrial Physics @ NASA MSFC

### Thursday, April 2, 2015 7:00 pm to 8:30 pm at the

#### Huntsville/Madison County Public Library's Main Auditorium

915 Monroe Street (corner of St. Clair Ave.), downtown Huntsville, Alabama <u>Event is FREE and open to the public</u>. A social will follow the meeting. For more information, visit our website: www.HAL5.org