

# **GLAST E/PO Program Status**

## Science Working Group Meeting 2/11/03

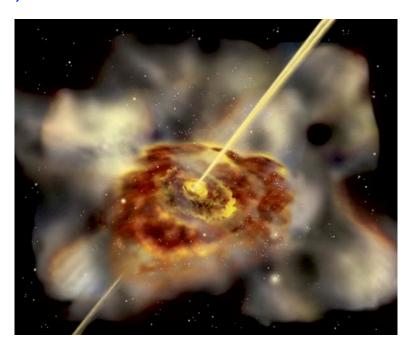
Lynn Cominsky
Sonoma State University





### E/PO Work Breakdown Structure

- 1) Management
- 2) Assessment and Evaluation (WestEd)
- 3) Web based Materials
  - Web Site continuous upgrade
  - Space Mysteries (2004-2005)
- 4) Educator Training
  - Educator Ambassadors Program
  - Conference participation
- 5) Printed materials
  - TOPS Lesson Modules
  - Posters and Activities
- 6) SLAC Virtual Visitor Center (2004)
- 7) PBS documentary (Tom Lucas Productions) (2003-2005)
- 8) GLAST Telescope Network





# **Educator Training**

- Workshops and Meetings in 2002 (since last SWG)
- 10/8/02 EA Jason Smith presented a teacher training workshop in D.C. public schools for The Challenger Center's Journey through the Universe program, including a GLAST overview to about 90 teachers
- 10/12/02 EA Jason Smith presented a brief overview of GLAST at the World Space Congress in Houston, TX to about 30 teachers
- 10/14/02- EA Daryl Taylor presented GLAST material at the NJSTA Pre-Conference Workshop to ~50 teachers
- 11/14/02 EA Teena Della was the keynote speaker at a Quantum Leaps
   Career Workshop put on by SCWIST (Society for Canadian Women in Science
   and Technology) at Capilano College in North Vancouver, BC
- 11/16/02- EA Daryl Taylor presented GLAST materials in a Gloucester County (NJ) Science Teacher's Workshop to about 75 teachers
- 11/24/02 EA Teena Della spoke about GLAST at Alouette Elementary in Maple Ridge, BC to 3<sup>rd</sup> graders who built the model AGN and drew it from different perspectives





# **Educator Training**

- Workshops and Meetings in 2003
- 1/14/03 EA Jason Smith presented a GLAST Mission briefing and activity demo, for the Challenger Center of Greater Washington to 15-25 Virginia Middle school teachers
- 2/14 & 2/21/03 EA Teena Della will be giving a total of five teacher workshops entitled "NASA: Magic in the Classroom" at the Coquitlam Teacher Association and the Vancouver, BC teacher professional development days.
- **2/24/03** EA Jason Smith: Short GLAST Mission Overview and poster handout, for San Diego Journey Through the Universe Week
- 2/13/03 EA Daryl Taylor: 7th Annual Taylor Workshop at WHS, including GLAST material
- 3/27/03 Phil Plait and EA Daryl Taylor will do TOPS workshop at National Science Teachers Association
- 4/11/03 Lynn Cominsky and EA Mike Ford will do TOPS workshop at National Council for Teachers of Mathematics



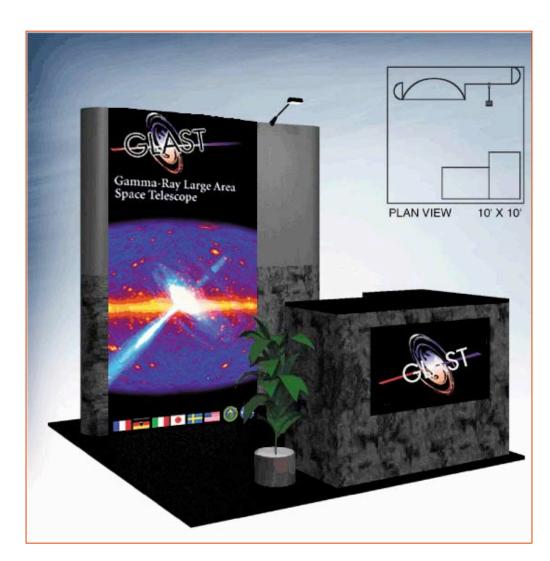
# **Educator Training**

- Workshops and Meetings in 2003 (submitted)
  - 4/03 EA Tim Brennan will present "Where particle physics meets orbiting astronomy: NASA's GLAST Program" at the AAPT-regional meeting in Williamstown, MA
  - 10/03 EA Jason Smith will present The Gamma Ray Universe at the NSTA Eastern Regional in Louisville, Kentucky.
  - 10/03 –Lynn Cominsky and Sarah Silva will present AGN workshop at CSTA in Long Beach, CA
  - 11/03- EA Mike Ford will present Astronomy with GLAST, and the GLAST Telescope Network (GTN) at NSTA Mid-west Regional in Kansas City
  - 12/03 Lynn Cominsky will present AGN activities at the NSTA Western Regional in Reno, NV
- Learning at a Distance web site for EAs now up! http://epo.sonoma.edu/eas\_lad/



### Exhibit Booth – 2003 events

- AAPT in Austin, TX (1/03)
- •AAS in Seattle, WA (1/03)
- •HEAD/AAS in Quebec (3/03)
- •NCN-AAPT at SSU (04/03)
- AAS in Nashville (5/03)
- •CSTA in Long Beach, CA (10/03)





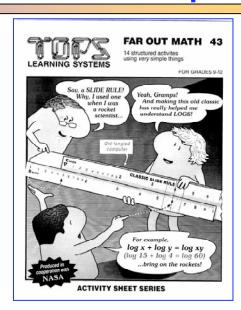
#### **Printed Materials and Curriculum Development**

### TOPS (Ron Marson)

- "Far Out Math!": using sliderules to understand powersand logarithms – now available!



- Educator's guide now complete, about to go through GPO approval cycle will be printing 2000
- 5000 more posters will be printed with activity on back
- AGN image featured in SEU "Beyond Einstein" Roadmap and used in a GSFC press release, featured on NASA home page!





## **GLAST Telescope Network**

- RTS-1 (SSU robotic telescope)
  - now being polar aligned at SSU Observatory
  - CCD and filter tests underway
  - Archiving system in draft release
  - Will be Internet accessible and taking AGN data by Spring 2003
- Proposal submitted to California Academy of Sciences to locate RTS-1 at Pepperwood
- Plait and Spear were able to control Mike Ford's telescope in Kansas, over the Internet
- GTN-AAVSO poster presented at AAS in Seattle
- GTN web site redesigned it is now "self-starting"
- GLAST scientists needed to partner with AAVSO, high school students and other participants





### Other activities

- PBS special work just starting, subcontract now in place.
   NSF proposal is due 5/30/03
- WestEd not yet under contract for FY03, due to funding lag
- TOPS not yet under contract for FY03, due to funding lag
- UC Santa Cruz activities approved, in progress
- Next poster/activity set will feature supernova remnants, joint with XMM-Newton
- GLAST brochure design now underway
- Magic cube design to be joint with Spectrum-Astro
- Space Mysteries start will be delayed until 2004 due to concept revamp and (non-GLAST) funding lag





### **Summary**

- E/PO program functioning smoothly
- Educator Ambassadors in high gear
- Products are being completed and widely distributed