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# GLAST E/PO Program Status

## Science Working Group Meeting 2/11/03

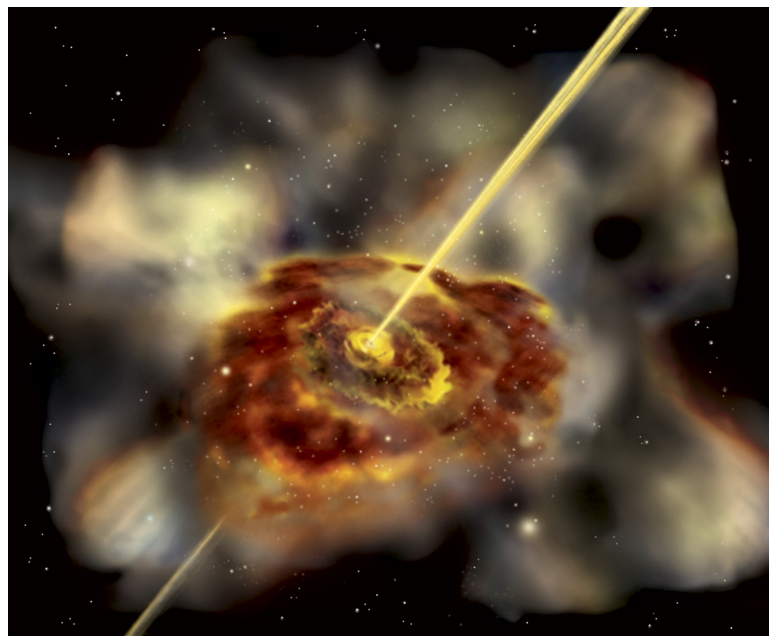
Lynn Cominsky  
Sonoma State University



# E/PO Work Breakdown Structure

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- 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

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- **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

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- **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

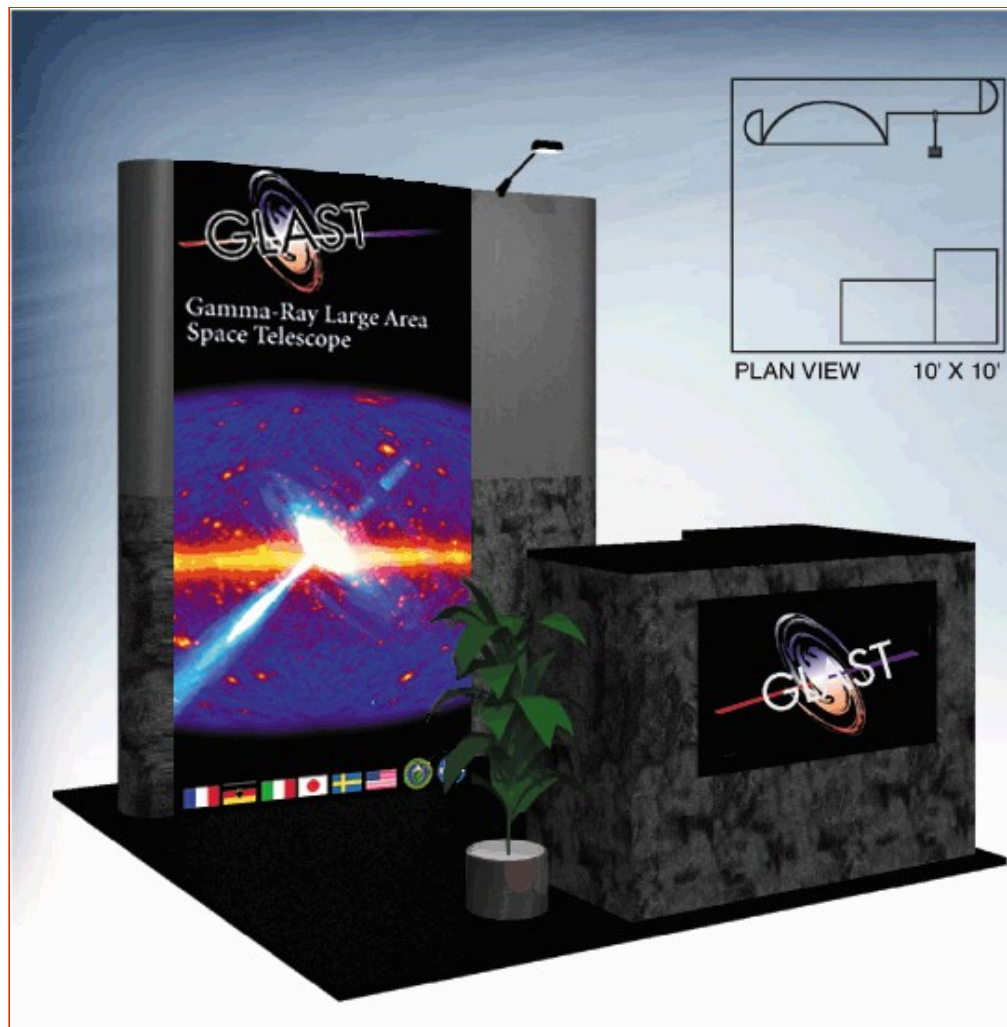
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- **Workshops and Meetings in 2003 (submitted)**
  - **4/03** – EA Tim Brennan will present “Where particle physics meets orbiting astronomy: NASA’s GLAST Program” at the AAPT-regional meeting in Williamstown, MA
  - **10/03** - EA Jason Smith will 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/](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)





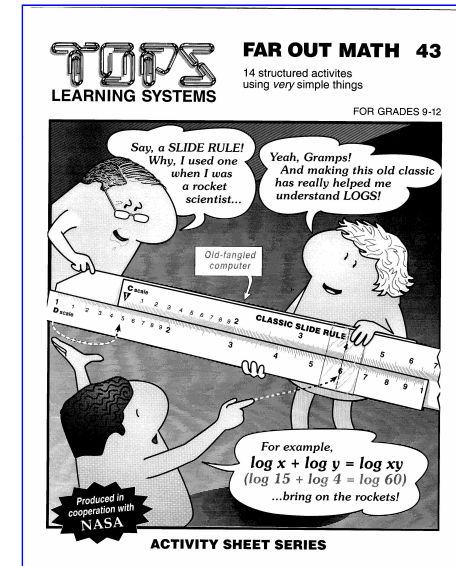
## Printed Materials and Curriculum Development

- TOPS (Ron Marson)

- “Far Out Math!”: using slide rules to understand powers and logarithms – now available!

- GLAST AGN Materials

- 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

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- 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

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- 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

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