
LIGO Research Community: The View From LIGO

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LIGO Project

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LIGO-G960002-00-M

LIGO Users Community

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Traditional “Users” Models

- High Energy and Nuclear Physics
 - » Accelerators
 - CERN, FNAL, TRIUMF, SIN, Frascati, Saclay
 - » Reactors
 - Grenoble
- Astronomy
 - » Telescopes
 - Palomar, Arecibo, Submillimeter, Owens Valley, Hubble
- Magnetic Fusion Machines
 - » TFTR, MFTF, ITER
- Materials Science
 - » Light Sources
 - » Spallation Sources

“User” Models (recited by a high energy physicist)

- Facility capabilities supported by in-house team
- Access to facility generally open to international community
- Research can be collaboration between in-house and community scientists or can be completely independent
- Research proposals are collaborative and submitted to peer review
- Review includes scientific/technical review and agency funding review
 - » Scientific review generally held by facility Director/Principal Investigator
 - » Agency holds funding review
- Facility creates a Program Advisory Committee
- Users organize a Users Group with elected leadership and charter
 - » Users Group becomes the “customers” voice

Immediate User Issues

- User requirements for facilities
 - » Visitor accommodations - offices, labs, food, sleeping quarters
 - » Clean room storage and work areas for test and assembly - "staging" areas and labs
 - » Computing
 - » Intellectual climate
- Computing infrastructure
 - » hardware environment
 - » software tools
 - AVS vs. Khoros
- Review of proposals
 - » Early LIGO program
 - » Advanced detectors

National/International

- US groups
 - » NSF funding proposals
 - » LIGO project deliverables funded by LIGO
- International Gravity Wave Network
 - » Interlaboratory agreements to share data for combined results
 - » Share in technology development
- International joint projects
 - » Government to government

AVS 5 vs. Khoros 2

- Price
 - » AVS is \$7K - \$25K/user
 - » Khoros is "free"
- Support
 - » AVS offers commercial type support
 - » Khoros is informal and unpredictable
 - LIGO may have to hire support staff
- Distribution licenses
 - » AVS run-time modules cost \$
 - » Khoros executable modules free

LIGO considering selection within 1995

(LIGO has negotiated "community" price 40% lower)

Aspen Discussions

- "Users Group Charter" strawman (Berley/BNL model) discussed
 - » "Users" changed to "Research Community"
 - » Changes made to Executive Committee and nominating process
 - » Revised draft charter agreed to at end of day
- Communique sent internationally by Syd Meshkov
 - » Conference proceedings and communique (L950365) available
 - » comments on role of LIGO Research Community
 - » comments on nominating process
 - » comments on composition, membership, and organization
 - » names submitted for Nominating Committee and LIGO Pre Program Advisory Committee
- Response was very supportive and constructive

Discussions with VIRGO

- Barish/Sanders meeting with Giazotto/Brillet in March
- Broad agreement on need for intimate collaboration to optimize physics output of LIGO/VIRGO
- Draft of Memorandum of Understanding underway
- Agreement to exchange personnel, information, technical advice, technology
- Plan to form working groups on data collection, data analysis protocols, observing/maintenance cycles
- Possibility to jointly form LIGO/VIRGO Research Community with rotating meetings

External Users and Advisors

- LIGO involvement with the scientific community
 - » All who are interested in exploiting the scientific opportunities offered by LIGO
 - » Nominating Committee
 - » Executive Committee
- Pre Program Advisory Committee
- Program Advisory Committee
- External Advisory Committee

LIGO Decided to ask Pre-Program Advisory Committee to facilitate formation of EAC, PAC, LRC Ex. Comm.

LIGO Research Community Web Page



LPPAC Formation

Acrobat Document

Election Results



Membership Invitation

LRC Charter

Memoranda of Understanding

- Standardized format
 - » MOU - broad areas of agreement, legal principles, description of general programs, no fixed term
 - » Attachments - written as needed with fixed terms and describing specific tasks, deliverables, dates and payments, if relevant. These may be rewritten and replaced without modifying the MOU
- NSF visibility/concurrence
 - » domestic, <\$100K - NSF provided copies
 - » domestic, >\$100K - NSF concurrence
 - » international, NSF concurrence

Plans

- LIGO Research Community
- MOU's
- LIGO/VIRGO working groups
- LIGO Visitor's Program
- Program Advisory Committee
- External Advisory Committee