iVDGL Planning Meeting

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University of Florida

LIGO Scientific Collaboration (LSC) iVDGL Participation

- ## University of Wisconsin at Milwaukee
  - » 4 investigators (not funded by iVDGL) + new hires
- ## The Pennsylvania State University
  - » 1 investigator (not funded by iVDGL) + new hires
- ## Caltech
  - » 2 investigators (not funded by iVDGL)

LIGO Scientific Collaboration (LSC) iVDGL Plan

- **iVDGL Organization Working Group Participation**

  - » Management Definition Group (A. Lazzarini)
  - » Facilities Team (Co-leader: B. Allen, UWM)
  - » Software Integration Team (Co-leader: S. Koranda, UWM)
  - » Applications Team (Co-leader: L.S. Finn)

LIGO Scientific Collaboration (LSC) iVDGL Plan

- **Two Tier 2 centers**
  - » University of Wisconsin Milwaukee
    - Builds on existing 290 node cluster funded through previous NSF MRI grant
    - 0.2 FTE for IT support (+ existing FTE support)
    - 2 FTE for Applications integration: GRAs+Postdocs
    - 1 PPARC Fellow for CS support
  - » Pennsylvania State University
    - New Physics Frontier Center for Phenomenological Gravitational Wave Data Analysis
    - New Tier 2 center
    - 0.2 FTE for IT support (+ PSU contributed IT FTE support)
    - 2 FTE for Applications integration: GRAs+Postdocs
    - 1 PPARC Fellow for CS support
- **0 FTEs presently hired**

LIGO Scientific Collaboration (LSC) iVDGL Plan

- LSC Tier 2 centers will be used for:
  - » Data mirror for key datasets to offload LIGO Laboratory Tier 1 center
  - » Grid-based analysis of LIGO data for computationally intensive searches
    - – Augments LIGO Laboratory capabilities
    - – Used for tasks requiring either LDAS MPI-based analysis or Condor-G asynchronous jobs
  - » Algorithm validation/testing on data subsets prior to production
  - » Monte Carlo simulations
  - » Targets of next implementation of LIGO-GriphyN Apps after Super Computing Conference demonstration projects
- Will participate in iVDGL/iGOC activities as requested

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LIGO Scientific Collaboration (LSC) iVDGL Plan

- Concerns
  - » LSC participation in grid activities is still small but growing:
    - Collaboration needs to define internal plan for Tier 2 center usage, resource allocations, etc.
    - Grid computing requirements not defined by the collaboration -- needed before PSU Tier 2 center is started and additional UWM resources installed
  - » LSC needs CS support of 2 PPARC Fellows - one per site
    - There are no FTEs within LIGO dedicated to grid computing implementation
    - Support at Tier 2 centers for the deployment of grid tools and their integration/interfaces to the existing LIGO software suite (LDAS)
- LSC has formed a Computing Committee to address collaboration issues
  - » Representation by LIGO Lab., Tier 2 ctrs & user institutions
  - » First meeting scheduled for 15 January 2002 - establish agenda, priorities, long range planning