

Attachment SUS to the
Memorandum of Understanding (LIGO-M950059-00-M)
between the
Experimental Relativity Group of the Louisiana State University (LSUERG)
and the
Laser Interferometer Gravitational Wave Observatory (LIGO)
August 15, 2005

This Attachment SUS to the Memorandum of Understanding LIGO-M950059-00-M defines the role of the Louisiana State University Experimental Relativity Group (LSUERG) as a Member of the LIGO Scientific Collaboration (LSC) and a member of the Isolation/Suspension/Thermal Noise Development Group (ISTNDG). The period of performance for the activities in this Attachment is from August 15, 2005 to August 15, 2006.

1. Isolation/Suspension/Thermal Noise Development Group - The Isolation/Suspension/Thermal Noise Development Group (ISTNDG) is the scientific collaboration for defining and developing future isolation and suspension improvements for use in advanced subsystems for the initial LIGO interferometers or in entirely new advanced interferometers. MOU Attachments define the roles and responsibilities of groups in this development group.
2. During the period August 15, 2005 to August 15, 2006, the members of LSUERG members will participate as follows:

Giaime will serve as chair of the Suspensions and Isolation Working Group, organizing regular phone meetings and sessions at the LIGO Science Collaboration Meetings.

Joe Giaime will serve as lead scientist of the Advanced LIGO seismic isolation team. This involves coordination of LSC work at LLO, Caltech, Stanford, MIT, JILA, and LSU, as well as AdLIGO proposal preparation duties, procurement, planning, and instrument design and testing. LSU will provide lock/unlock mechanisms and electronics for the LASTI advanced LIGO seismic isolation prototype. Also, LSU will participate in the R&D for the advanced LIGO technology demonstrator system at Stanford and the Adv LIGO seismic prototypes for LASTI. This includes the design, construction and commissioning phases.
3. Resource Sharing: The LIGO Laboratory will contribute resources including allocation of appropriate scientific and engineering personnel, research facilities and funding in support of the effort in Item No. 2, as indicated below.
 - a) Research accommodations for LSUERG group members while on LIGO research assignment at any LIGO Laboratory site,
 - b) Access to LIGO data in support through established LSC channels in support of this

work.

4. Coordination and Reporting – LSUERG Group will perform this research within the structures established by the LIGO Laboratory and the LSC where appropriate. In particular activities described in Item 2 will be carried out within Isolation/Suspension/Thermal Noise Development Group of the LSC. Coordination will include keeping the Group leaders informed of activities and plans, reporting to the group at meetings and telecons, and through technical documents submitted to the LIGO Document Control Center.

In addition, an annual report will be submitted with the update to this Attachment, giving a summary status on research by topic as indicated in Item No. 2, including progress against the milestones if any, significant accomplishments such as new insights/discoveries or publications, issues of concern if any, and an indication of invested time. This Attachment will be updated at least annually with a plan of activities for the succeeding on-year period. These documents will be due one month before the close of the period of performance under this Attachment.

Approved:

Barry Barish
LIGO Laboratory Director

Joseph A. Giaime
LSUERG Principal Investigator

Peter Saulson
LSC Spokesperson

Joseph Giaime
ISTNDG Leader