

**MEMORANDUM OF UNDERSTANDING BETWEEN  
THE LIGO SCIENTIFIC COLLABORATION AND THE PLANETARIUM AT THE  
UNIVERSITY OF TEXAS AT ARLINGTON**

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The Laser Interferometer Gravitational-Wave Observatory (LIGO) is a facility dedicated to the detection of cosmic gravitational waves and the measurement of these waves for scientific research. It consists of two widely separated installations within the United States, operated in unison as a single observatory. LIGO is available for use by the world scientific community, and is a vital member in a developing global network of gravitational wave observatories.

The LIGO Scientific Collaboration ("LSC") developed and produced a dynamic, engaging traveling display relating to gravitational waves and the scientific research being conducted at the LIGO observatories (the "Exhibit") with funding from National Science Foundation through the University of Mississippi.

The LSC and the Planetarium at the University of Texas at Arlington ("UTA") wish to collaborate on the display of a traveling exhibit with the goal of broadening the community of people interested in science and encouraging interest in science among young people in a mutually beneficial manner, according to the following understanding.

**1. Term.**

- 1.a). The term of collaboration and performance of the activities contemplated in this Memorandum of Understanding ("MOU") is from March 1, 2011 to August 1, 2011. This period may be modified by mutual agreement in writing.

**2. Venue.**

- 2.a). UTA will host the Exhibit at a suitable mutually approved indoor public location (the "Venue") from April 1st, 2011 to July 26<sup>th</sup>, 2011. In order to maintain consistency with the exhibit design, LSC will have the right to approve the Venue and Venue signage as pertains to the Exhibit. UTA will keep LSC informed on a regular basis regarding plans and status for the preparation of the venue to enable LSC to provide timely feedback and approvals.
- 2.b). UTA will be solely responsible for providing the Venue. The Venue must conform to the following minimum characteristics:
1. Minimum square footage of approximately 240 sq. ft., 22'-0" (w) × 11'-0" (d).
  2. Unobstructed minimum height clearance of 9'-0" across the display area.
  3. Access entry with minimum linear dimensions of 7'-0" (h) × 5'-0" (w).

4. Be equipped with a minimum of four standard working 120 V electric outlets on the peripheral walls. UTA will be solely responsible for providing electric power for set up, test, tear-down and public display of the Exhibit.
5. Include clean storage space for storing the Exhibit packing material and casing during the display.

### 3. Security and Insurance.

3.a). UTA will offer security measures against foreseeable damage, vandalism and theft by providing access-restrictions to the Venue (such as locked rooms, security cameras) during closing hours, but otherwise be in a trafficked area for maximizing public access during opening hours. UTA will be responsible for any damages, theft, or vandalism incurred while the Exhibit is on its premises.

3.b). ~~It is understood that UTA will have in force a liability insurance as stated in the attached "Summary statement of insurance risks for the University of Texas system" for the entire duration of the Exhibit display at UTA.~~

*See attached letter.*

### 4. Exhibit Set-up, Testing and Tear-down.

4.a). UTA will provide to LSC access to the Venue for setting up, testing, and taking down the Exhibit up to two days before and after the display dates listed in Art. 2.a.

4.b). UTA will provide a working crew of minimum three people during set-up, test and tear-down of the exhibit (the "crew"). The crew will work under the supervision of a member of the LSC but will not be otherwise affiliated by any means with the University of Mississippi nor the LSC. UTA will be solely responsible for any labor compensation, wages or any other costs related to work performed by the crew. The University of Mississippi and LSC will not be held responsible nor liable for any bodily injury of crew members. LSC will bear the cost of travel and stay of the LSC working supervisor during set-up, test, and tear-down of the Exhibit.

4.c). UTA will provide a minimum of two medium duty 8'-00" ladders and a set of common working tools for set-up and tear-down (such as electric drill, screwdrivers, wrenches, hammers, etc.)

### 5. Transportation.

5.a). UTA will bear all related costs for load at origin and inbound transportation of the Exhibit by an insured carrier from Trinity University, San Antonio, Texas, to the Venue. UTA will be solely responsible for timely payment to the carrier.

**6. Educational Outreach.**

LSC and UTA will cooperate on educational outreach related to the Exhibit in the following way:

- 6.a). Upon request by UTA, a LSC scientist (name TBD) will deliver a public lecture (the "Lecture") on gravitational waves and LIGO research (title TBD) at a mutually approved time and location. LSC will bear the cost of travel and stay of the LSC scientist. UTA will be solely responsible for the procurement of a suitable venue and for any reasonable equipment which is necessary for the delivery of the Lecture.
- 6.b). To the extent allowed by available time and resources, UTA and LSC will work together to organize additional outreach activities (TBD).

**7. Publicity and Marketing.**

- 7.a). LSC and UTA will work together to schedule the Exhibit opening, to build public visibility and attendance at the Exhibit, and ensure consistency with other planned LSC events.
- 7.b). UTA will be responsible for locally advertising the Exhibit and additional outreach activities in consultation with LSC and in a manner consistent with its advertising strategy. LSC must approve all references to the Exhibit and ancillary activities included in such advertising. At its discretion, LSC reserves the right of independently market and advertise the Exhibit. LSC may provide additional local publicity for the Exhibit and the Lecture in coordination with UTA. LSC and UTA will permit each other to use their respective names and logos in connection with publicizing the Exhibit and additional outreach activities, provided that all such uses are approved in advance, and all related texts shall be approved by both partners.

**8. Acknowledgment of Collaboration.**

- 8.a). UTA will acknowledge its collaboration with LSC in a prominent manner at the Exhibit and ancillary activities, in all publicity relating specifically to these events, and in an appropriate location on the UTA website leading up to and including the dates of the Exhibit. LSC will also acknowledge its collaboration with UTA in a prominent manner in all publicity relating to the Exhibit, and in all reports relating to the Exhibit. To the extent allowed by available time and resources, UTA and LSC will work together to develop additional, appropriate ways of publicizing their collaboration.

**9. Intellectual Property and Licenses.**

9.a). LSC will retain all rights in and to the Exhibit. In addition to the uses described in Paragraph 6, the parties will permit each other on a non-exclusive basis to use a reasonable number of photographs, clips of video footage and other documentation of the Exhibit (subject to any applicable third party rights) for their respective educational purposes and promotional purposes, including mutually approved use on each party's website (with appropriate crediting and where possible a link to the other party's website) and in relevant reports to funders, regulators and other entities.

#### 10. Cancellation/Postponement.

10.a). In the unlikely event that the Exhibit display must be postponed or cancelled due to events beyond the reasonable control of either LSC or UTA, the Parties will work together to agree on a mutually acceptable schedule for performance of their respective obligations, taking into account the nature of the reasons for cancellation or postponement.

#### 11. Entire MOU

11.a). This MOU represents the entire and integrated agreement between LSC and UTA and supersedes all prior negotiations, representations, or agreements, either written or oral. This MOU may be amended only by written instrument signed by both LSC and UTA. UTA confirms that the signor of this MOU is indeed an authorized representative of UTA. By signing this MOU UTA agrees that funds due per the MOU terms are UTA responsibility to pay.

#### 12. Compliance with Laws.

12.a). In performing this MOU, UTA, LSC and the University of Mississippi will comply with all applicable laws, regulations, rules and other requirements of any governmental authority having jurisdiction. Any and all permits required in the occurrence of set-up, testing, display and tear-down of the exhibit will be UTA responsibility, exclusively, to obtain and maintain. It is understood that the University of Mississippi and UTA agree to this MOU to the extent they are authorized to do so under Mississippi law and Texas law, respectively.

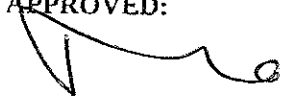
#### 13. Changes, Additions, Stipulations or Lining Out.

13.a). Additions, stipulations, or deletions including corrective lining out by either LSC or UTA will not be considered agreed to or binding on the other unless such modifications have been initialed or otherwise approved in writing by the other.

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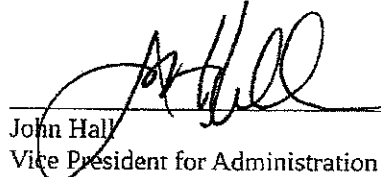
LIGO M1000 VI

APPROVED:



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David Reitze  
Spokesperson, LIGO Scientific  
Collaboration



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John Hall  
Vice President for Administration and Campus  
Operations, University of Texas at Arlington



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Marco Cavaglia  
Chair, LSC Education and Public Outreach



THE UNIVERSITY  
OF TEXAS  
AT ARLINGTON

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February 8, 2011

David Reitze  
Spokesperson  
LIGO Scientific Collaboration  
PO Box 118440  
University of Florida  
Gainesville, FL 32611-8440

Re: Certificate of Insurance

Dear Mr. Reitze:

Regarding your company's requirements for liability coverage for The University of Texas at Arlington, the following statement is provided:

***SUMMARY STATEMENT OF INSURANCE RISKS FOR  
THE UNIVERSITY OF TEXAS SYSTEM***

**REFERENCE:** Civil Practice and Remedies Code, Chapter 101  
Texas Labor Code, Chapter 503

**General Liability**

*It is the stated policy of the State of Texas not to acquire commercial general liability insurance for torts committed by employees of the state who are acting within the scope of their employment. Rather, Chapter 101 of the Civil Practice and Remedies Code states "that a governmental unit in the state is liable for property damage, personal injury, and death proximately caused by the wrongful act or omission or negligence of an employee acting within his scope of employment..."*

*Liability of the state government under this chapter is limited to money damages in a maximum amount of \$250,000 for each person and \$500,000 for each single occurrence for bodily injury or death and \$100,000 for each single occurrence for injury to or destruction of property.*

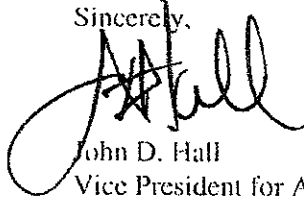
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**Workers' Compensation**

*Employees of the University of Texas System are provided Workers' Compensation coverage under a self-insuring, self-managed program as authorized by the Texas Labor Code, Chapter 503.*

Should you have any questions, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Hall", written over a large, stylized flourish that loops back to the left.

John D. Hall  
Vice President for Administration  
and Campus Operations

c: Marco Cavaglia w/LSC Education and Public Outreach,  
The University of Mississippi University

