

## **Memorandum of Understanding**

**between the**

**Department of Chemistry and Physics at Southeastern Louisiana University  
(DCP/SLU)**

**and the**

**Laser Interferometer Gravitational Wave Observatory (LIGO) Laboratory**

**December 1, 1999**

The purpose of this Memorandum of Understanding is to establish and define a collaborative relationship between the Department of Chemistry and Physics at the Southeastern Louisiana University (DCP/SLU) and the Laser Interferometer Gravitational Wave Observatory (LIGO) Laboratory of the California Institute of Technology. Both parties to this agreement share the joint goals of observing gravitational radiation and of using gravitational radiation as an astrophysical probe. This agreement is intended to further these joint goals.

1. The primary goal of the Department of Chemistry and Physics (DCP/SLU) at the Southeastern Louisiana University, will be to investigate the physics relevant to the technology of gravitational wave detection and to apply this research to the improvement gravitational wave detectors, with special emphasis on LIGO. DCP/SLU will start its activities in support of LIGO in December 1999 under direction of the Department of Chemistry and Physics Head and faculty member Dr. Linda Munchausen.
2. The Laser Interferometer Gravitational-Wave Observatory (LIGO) Laboratory is aimed at opening the field of gravitational-wave astrophysics through the direct detection of gravitational waves. LIGO detectors will use laser interferometry to measure the distortions of the space between free masses induced by passing gravitational waves. The design, construction, and operation of LIGO is being carried out by scientists, engineers, and staff at the California Institute of Technology (Caltech) and the Massachusetts Institute of Technology (MIT). Caltech has prime responsibility for the project under the terms of a Cooperative Agreement<sup>1</sup> with the National Science Foundation (NSF). LIGO will become a national facility for gravitational-wave research, providing opportunities for the broader scientific community to participate in detector development, observations and data analysis. LIGO welcomes the participation of outside scientists at any of these levels. LIGO is being constructed in a phased approach beginning with one three-interferometer detector system and evolving to a multiple interferometer configuration to enable simultaneous use by several gravitational-wave observation systems.
3. In entering into this Memorandum of Understanding, the LIGO Laboratory will carry out its responsibilities following the requirements of the Cooperative Agreement<sup>1</sup>.

---

1. Cooperative Agreement No. PHY-9210038 between the National Science Foundation, Washington, D.C. 20550 and the California Institute of Technology, Pasadena, CA 91125, dated May 1992.

4. The LIGO Laboratory is responsible for obtaining NSF approval of all collaborative Memoranda of Understanding with international partners, or of those involving NSF costs exceeding \$100,000. All Memoranda of Understanding will be provided to NSF for their information.
5. Each party to this agreement continues to be responsible for all support of its staff including travel costs associated with the activities under this agreement. Exceptional support by the other institution may be allowed for support, as mutually agreed by parties to this agreement.
6. This Memorandum of Understanding will remain in force until the parties mutually agree to terminate it. An annual Attachment will define specific activities if any, beyond those spelled out in this document, to be carried out during the period in question.

Approved:

Barry Barish

Barry Barish  
LIGO Laboratory Director

11/8/99

Date

Sally Clausen

Sally Clausen  
President  
Southeastern Louisiana University

12/8/99

Date

Randy Moffett

Randy Moffett  
Provost  
Southeastern Louisiana University

12/6/99

Date

John Miller

John Miller  
Dean of Arts and Sciences  
Southeastern Louisiana University

30 Nov 99

Date

Linda Munchausen

Linda Munchausen  
Head of Department of Chemistry and Physics  
Southeastern Louisiana University

22 Nov 1999

Date