



**Attachment OUT to the
Memorandum of Understanding LIGO-M050377-00
between the University of Wisconsin at Milwaukee (UWM)
and the
Laser Interferometer Gravitational Wave Observatory (LIGO)
For The Period
August 15, 2009 - August 14, 2010**

This Attachment OUT to the Memorandum of Understanding LIGO-M050377-00 defines the role of the University of Wisconsin at Milwaukee (UWM) as a Member of the LIGO Scientific Collaboration (LSC) in support of Education and Outreach to the broader community. The period of performance for the activities in this Attachment is from August 15, 2009 - August 14, 2010.

1. Education and Outreach

As a frontier physics effort, LIGO offers a unique opportunity to inspire interest in science among students and to educate the broader community. The LIGO Laboratory supports a broad program of education and outreach to take advantage of these opportunities.

Activities to attract and educate visitors take place at both Observatories, as well as the development of educational materials for use there and elsewhere.

The LIGO Laboratory is building a Science Education Center at the Livingston Observatory, and is participating with local partners to make it a vehicle for science education throughout the region. LSC groups are invited to participate in these activities, and to suggest others, with the goal of leveraging activities to make a greater impact.

This MOU Attachments defines the role and responsibilities of groups in this development group.

2. Participation

During the period August 15, 2009 - August 14, 2010, the members of UWM will participate in in LDG in the following areas:

- a. Educational Materials Developed

Not Applicable

- b. Other Contributions

1. Outreach

- (a) Einstein@Home: UWM (Allen, Hammer, Siemens) will continue to support the outreach aspects of the Einstein@Home project.
- (b) Local high-schools: The UWM group is involved in a number of activities, not solely related to LIGO, which reach out to local high-school students and teachers. Siemens, Clayton, Price and others lead a weekly astronomy club meeting and lead the Arecibo Remote Command Center at UWM. Over the next year, the UWM group will enhance its outreach activities with additional focus on LIGO and gravitational-wave astronomy.

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 UWM group members while on LIGO research assignment at any LIGO Laboratory site.

Not Applicable

- b. Access to LIGO data through established LSC channels in support of this work.

Not Applicable

4. Coordination and Reporting

UWM will perform 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 with the LIGO Observatories Educational and Outreach Leaders.

This includes 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 one-year period. These documents will be due one month before the close of the period of performance under this Attachment.

5. Computer Code

All computer code delivered to the LSC under this Attachment must be developed in consultation with the LSC Data Analysis Software Working Group (DASWG) and archived, documented and reviewed as determined by that group.

Signature Pending Approval

Jay Marx
LIGO Laboratory Director

A handwritten signature in black ink, appearing to read "Patrick R Brady". The signature is written in a cursive style with a large, stylized initial "P".

Patrick R Brady
Principal Investigator(s)
UWM

Signature Pending Approval

David Reitze
LSC Spokesperson