

**Attachment Number 2 to the
Memorandum of Understanding (LIGO-M970009-00-M)
between the
TAMA Project, Japan
and the
Laser Interferometer Gravitational Wave Observatory (LIGO) Project
September 1, 1998**

This Attachment to the Memorandum of Understanding LIGO-L970009-00-M describes a cooperative research effort between the TAMA Project, Japan and the Laser Interferometer Gravitational-Wave Observatory (LIGO) Project to investigate the effects of mirror imperfections. The period of performance for the activities in this Attachment is from September 1, 1998 to August 31, 1999. This period may be modified by agreement to a revision of this Attachment.

1. The goal of this work is to understand the effects of mirror imperfections. LIGO will provide the FFT (Fast Fourier Transform) program developed at MIT to TAMA. TAMA members (staff and students) will use this software to analyze the performance of the TAMA 300 detector.
2. This task will be led by Masatake Ohashi for TAMA and Hiro Yamamoto for LIGO.
3. Work Plan- The tasks to be carried out and the methods for so doing are:
 - a. LIGO will provide the FFT program developed at MIT, and will support installation of the software on a computer provided by TAMA.
 - b. TAMA members will use the software to analyze the performance of the TAMA 300 detector.
 - c. TAMA intends to study the effects of mirror imperfections using the FFT program.
4. Technical, Schedule and Cost Reporting - The status of the work will be reviewed in a monthly report by e-mail involving all interested parties from TAMA and LIGO. The emphasis of these reports will be on technical and schedule issues.
5. Cost - Each group will be responsible for the salaries and travel expenses of its staff participating in this effort. Reciprocal Exchange visits are also expected. The main experimental work will take place at TAMA.

Approved:

Barry Barish
Barry Barish
LIGO Principal Investigator

Yoshihide Kozai
Yoshihide Kozai
TAMA Principal Investigator

Sept 10, 1998
Date

Sept 17, 1998
Date