

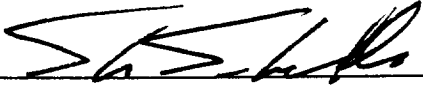
**Attachment Number 1 to the**  
**Memorandum of Understanding (LIGO-M990253-00-M)**  
**between the**  
**Department of Physics, Graduate School of Science, The University of Tokyo,**  
**Japan**  
**and the**  
**Division of Physics, Mathematics and Astronomy,**  
**California Institute of Technology (Caltech)**  
**June 1, 1999**

This Attachment No. 1 to the Memorandum of Understanding LIGO-M990253-00-M between the Department of Physics, Graduate School of Science, The University of Tokyo, Japan and Division of Physics, Astronomy and Mathematics of Caltech, covers the assignment of Akiteru Takamori, a graduate student at The University of Tokyo, to participate in LIGO related gravitational-wave research at Caltech. The period of performance for the activities in this Attachment is from June 1, 1999 to May 31, 2001. This period may be modified by agreement to a revision of this Attachment.

1. This document is an agreement between the Department of Physics, Graduate School of Science, The University of Tokyo and Division of Physics, Mathematics and Astronomy of Caltech to accommodate and facilitate the research assignment of Akiteru Takamori on the LIGO gravitational-wave experiment at Caltech.
2. The LIGO Laboratory, serving as the host institution to Akiteru Takamori, will provide all facilities and infrastructure required for his research project.
3. Akiteru Takamori's research will involve development of ultra low frequency active and passive components of the seismic attenuation chains with the focus on suppression of the micro seismic peak and of the tilt component of the seismic noise.
4. Riccardo DeSalvo will be responsible for Akiteru Takamori's association with the LIGO Laboratory.
5. The assignment of Akiteru Takamori is made at the explicit request by the Division of Physics, Mathematics and Astronomy of Caltech on behalf of the LIGO Laboratory. Consequently, the Division of Physics, Mathematics and Astronomy of Caltech/LIGO Laboratory will share a portion of travel and subsistence costs incurred by Akiteru Takamori under this agreement. The support will be provided by appropriate LIGO Laboratory funds. The actual amount to be contributed by the LIGO Laboratory is subject to a mutual agreement.

6. The assignment of Akiteru Takamori will be coordinated by Professors Kimio Tsubono and Barry Barish for the Department of Physics, Graduate School of Science, The University of Tokyo and for the Division of Physics, Mathematics and Astronomy of Caltech, respectively. Any significant issues will be communicated and resolved in a collegial and timely manner.

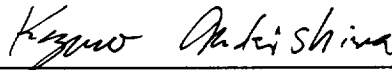
Approved:



Prof. Thomas Tombrello  
Chairman, Division of Physics, Mathematics,  
and Astronomy  
California Institute of Technology

7/11/99

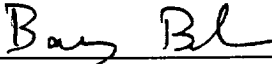
Date



Prof. Kazuo Makishima  
Head of Department of Physics,  
Graduate School of Science,  
The University of Tokyo

Aug. 6, 1999

Date



Prof. Barry Barish  
LIGO Laboratory Director

July 14, 1999

Date

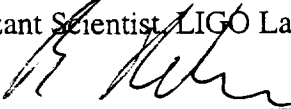


Assistant Prof. Kimio Tsubono  
Department of Physics,  
Graduate School of Science,  
The University of Tokyo

Aug. 6, 1999

Date

Dr. Riccardo DeSalvo  
Cognizant Scientist, LIGO Laboratory



Date