The University of Michigan

The Harrison M. Randall Laboratory of Physics 500 East University Ave., Ann Arbor, Michigan 48109-1120

High Energy Physics (734)764-4442

April 6, 2000

Prof. Barry Barish Director, LIGO Laboratory California Institute of Technology MS 18-34 Pasadena CA 91125

Dear Barry,

This letter is a request for access to LIGO engineering data by the Michigan Gravity Wave Group (MGWG) in the Department of Physics of the University of Michigan. This letter, which will be posted on the Web site of the LIGO Scientific Collaboration (LSC), is also meant to inform our LSC colleagues of our intended use of this data. We acknowledge that any publications arising from this data are subject to the LIGO/LSC Publications and Presentations Policy.

We wish to have access to data taken during the engineering run of April 3-4, 2000 with a single-arm 2-km interferometer at the LIGO Hanford Observatory. We intend to use this data to test and refine algorithms for 1) detecting servo instabilities; 2) detecting modulating or drifting line sources; 3) detecting large instrumental transients; and 4) quantifying linear and bi-linear correlations.

We understand that this data will be stored in the LIGO Data Archive at the Caltech Center for Advanced Computing Research (CACR) and request permission to transfer data from CACR to Michigan and to use CACR user accounts for analysis of larger amounts of data. We estimate the use of no more than 100 CACR CPU hours and the transmission of no more than 10 Gigabytes over the network. In addition, we may in the future wish to obtain a copy of the entire 24-hour data set on magnetic tape in AIT-2 format. We request permission to call upon LIGO Lab personnel to assist in writing the tape(s) for shipment to Michigan. We would provide the raw tape(s) for writing such a copy.

The persons working with this data at Michigan are Keith Riles, Dick Gustafson, David Chin and Joseph Marsano. Riles and Gustafson will work on servo instability and line sources, Chin will work on transient detection, and Marsano will work on correlation analysis.

Best regards,

Keith Riles Associate Professor, Physics

cc: Stan Whitcomb, LIGO Detector Group Leader Albert Lazzarini, LDAS Group Leader Rainer Weiss, LSC Spokesman Keith Riles, LSC Detector Characterization Group Chair