

12. Opportunities for Participation by the Astronomical Community

Both INAOE and UMass Amherst look forward to the use of the LMT by astronomers from around the world. We expect that this will involve both proposals to use existing LMT instruments, as well as requests to bring guest instruments built at other institutions.

12.1 Observing with the LMT

Observing time on the LMT will be divided between Mexico and the United States on the basis of their relative contributions to the capital cost of the telescope and to its instrumentation. At the time of this writing, these costs are not yet fully known; however, it is anticipated that the division will be approximately equal. Each side will determine its own procedures for allocating observing time to astronomers, with the joint goal of maximizing the scientific and educational productivity of the facility. In addition, a fraction of the total observing time during the first few years may be set aside for joint “key” projects of significant scientific impact, to be carried out collaboratively by INAOE and UMass Amherst astronomers.

It is expected that the “U.S. time” will be distributed in a manner consistent with that currently used at the FCRAO, UMass Amherst’s existing radio observatory. The FCRAO uses a Time Allocation Committee (TAC) that evaluates all proposals, both internal and external, for scientific merit, appropriateness for the specific instrumentation, and the training of students. Observing time is given on the basis of this evaluation. This procedure does not discriminate against scientists from any country or any institution, and over the last many years has resulted in roughly half the observing time going to astronomers from outside UMass Amherst. The corresponding committee for the LMT will certainly include members from the astronomical community at large, to provide a broader view of the field of astronomy and to ensure the fairness of the procedures employed. The “Mexican time” will also be awarded by a TAC and will be equally available to astronomers at any institution in Mexico.

12.2 Guest Instruments

Clearly, the instruments initially planned for the LMT do not cover all potentially important uses of the facility. Consequently, both LMT partners encourage other groups to bring complementary instrumentation for the telescope. Scientists interested in this possibility should contact the Observatory Director to discuss compatibility issues, time scales, and conditions of use.

Several of the initial LMT receivers will have been guest instruments at other observatories while the LMT was being completed. Thus, SEQUOIA has been employed very successfully at the FCRAO (see, for example, Figure 5.2), AzTEC is being used for observations on the JCMT in 2005, and SPEED is expected to be field-tested at the Heinrich Hertz Telescope, where it will remain for scientific applications until the LMT is commissioned.