

[LT03] Scientific Cases for Twin SPM telescopes: Extragalactic Astronomy

Myung Gyoon Lee¹

¹*Astronomy Division, Department of Physics and Astronomy, Seoul National University*

We report a study of scientific cases for extragalactic astronomy prepared for the planned twin 6.5m telescopes to be located at the San Pedro Martir in Mexico: one narrow field telescope and one wide field telescope.

[LT04] Extragalactic Science Topics for the Magellan-Type Narrow-Field-of-View KLT

Myungshin Im¹ and the KLT Science Working Group

¹*Astronomy Division, Department of Physics and Astronomy, Seoul National University*

We present possible extragalactic science projects that can be tackled with a copy of the Magellan 6.5m, 5-10 years from now. The construction of a Narrow-Field-of View Telescope (NFT), a replica of the 6.5-m Magellan telescope has been identified as a practical way to have a large Korean telescope in a short-time frame. On the other hand, facilities with similar capabilities already exist, and identifying forefront scientific programs with the NF-KLT appears to be a very challenging task. With such a handicap in mind, we review possible extragalactic science projects and observing strategy that could maximize the output from the NF-KLT. Some of interesting projects include; (i) time-domain extragalactic science such as monitoring of high redshift quasars and rapid follow-up of new sources from other surveys (e.g., LSST, PANSTARRS); (ii) high resolution spectral and imaging observations of distant objects, which is not possible with future space telescopes; and (iii) time-intensive survey of distant galaxies with a creative idea. As for the observing strategy, investing a significant amount of the Korean share to several key projects could net us maximal scientific outputs, in a similar way that many 4-m telescopes are operating nowadays.