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A Multi-wavelength Approach in Modern Astronomy

綱要:

台灣在過去十年中天文研究有著飛速的發展，已經能在擁有世界級觀測條件的台址設置一流的觀測設備，同時國內的天文研究和高等教育也有了長足的進展。觀測儀器的研發朝向多波段的方向前進，以從不同角度觀測宇宙。中研院天文所加入了哈佛大學的次毫米波天線陣，在夏威夷的火山頂上設置了總共八個的電波天線。另一個研究宇宙學的電波計畫 AMiBa 也正在進行。光學和紅外波段是最傳統也最早開始發展的波段，但是仍不斷的給出許多最新的研究成果。台灣最大的一米望遠鏡新近在中央大學鹿林前山天文台裝置完畢，已經投入工作。和其他國際機構在大型地面望遠鏡和太空行星探索任務的合作也正在進行，包含了「加拿大—法國—夏威夷」望遠鏡，史匹哲紅外太空望遠鏡，以及土星探測船卡西尼號等等。台灣在過去十年中，真正擁有了觀測宇宙的多波段視力！

The last 10 years have seen a rapid advance in astronomy in Taiwan. State-of-the-art instrument was developed and installed at remote sites which are located at places with superb observing conditions, while domestic infrastructure of astronomy research and education grew at an amazing and ever-faster pace. The effort on developing observational instrumentation also focuses on different wavelengths, for the purpose of viewing the universe from many different angles. ASIAA joins Harvard-Smithsonian in the establishment of the Sub-Millimeter Array on Mauna Kea in Hawaii. Another antenna in radio regime, the AMiBa, is also being developed for the study of cosmology. Optical/IR is the wavelength region that has received the earliest attention but is producing many exciting new results. A 1-m telescope, which is the largest optical telescope in Taiwan, has been installed and working on Lu-Lin Mountain by NCU since the Fall of 2002. Collaborations with international organizations on world-class telescopes or space probes, such as CFHT, Spitzer and Cassini, are ongoing. Taiwan in its past decade has developed a truly multi-wavelength vision of the universe.