

B02r **Taiwan's plan and science perspective to join TMT**

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The Thirty Meter Telescope (TMT) project will be one of the most important astronomical projects in the next two decades for optical and infrared astronomy. The high sensitivity and unprecedented angular resolution will bring answers and shed new light on fundamental questions on the origin of the Universe, the origin and evolution of galaxies, star formation and formation of planetary systems. A special scientific goal of TMT is to probe the physical properties and atmospheric environments of exoplanets. The Taiwanese astronomical community is very excited by these prospects and a feasibility study is to be performed to evaluate the scientific interest and technical capability in making contributions to this large-scale international project. To be successful, it will have to be a joint effort of the whole astronomical community with unanimous consensus with strong supports from the key institutions and funding agencies. A clear roadmap for technological development involving local instrument houses and industry and infrastructure build-up of human resource would be of critical importance. The search for international cooperation will be a major element in this activity. With a view to maximize the scientific opportunity of the next-generation astronomers in Taiwan and in Asia, interaction and cooperation with colleagues in the Asia-Pacific are particularly welcome. A brief report on the status and progress so far will be given in this presentation.