

[구LT-03] **Development of large aspherical mirrors in KRISS**

Ho-Soon Yang, Il-Kwon Moon, Jae-Bong Song, and Yun-Woo Lee  
*Korea Research Institute of Standards and Science*

본 논문에서는 한국표준과학연구원(이하 표준연)에서 그동안 개발한 다양한 크기와 종류의 비구면 가공결과에 대하여 소개한다. 특히 비구면은 구면과 달리 측정방법이 쉽지 않으므로 표준연에서 개발하여 사용하고 있는 비구면 측정방법에 대하여 자세히 소개한다. 현재 표준연은 직경 2 m까지 가공하고 측정할 수 있는 시설을 보유하고 있어 국내에서 이루어지고 있는 각종 대형 망원경 프로젝트에서 대형 비구면 미러를 가공하는데 핵심적인 역할을 할 것으로 기대한다.

[초LT-04] **New Scientific Frontiers with the Giant Magellan Telescope**

Warrick Couch  
*Swinburne University of Technology, PO Box 218, Hawthorn, VIC 3122, Australia*

The next generation Giant Magellan Telescope (GMT) will open a new window on the Universe for the 21st century. Scheduled for completion around 2017, the GMT's unique seven 8.4 meter segment primary mirror will it the equivalent light gathering power of a 22-meter telescope and the resolving power of a 24.5-meter telescope (ten times that of the Hubble Space Telescope at near-infrared wavelengths). As such, it will allow many questions at the forefront of astrophysics to be addressed and will pose new and unanticipated riddles for future generations of astronomers. In this talk, I will summarize the key science areas of frontier research that will be enabled by GMT, and how these are driving the design of the telescope and its instruments.

Keywords: Giant Magellan Telescope, GMT, GMT Project.

Biography:

Warrick Couch is a Distinguished Professor and Australian Research Council Professorial Fellow in the Centre for Astrophysics and Supercomputing at Swinburne University of Technology in Melbourne Australia. He received his M.Sc. from Victoria University of Wellington, in New Zealand, in 1977, and his PhD from the Australian National University in Canberra in 1982. He was a postdoctoral fellow at Durham University in the UK from 1982-85, and then returned to Australia to take up a National Research Fellowship at the Anglo-Australian Observatory. In 1989 he was appointed to a lectureship in the School of Physics at the University of New South Wales (UNSW) in Sydney. During the seventeen years he was at UNSW, he rose to the rank of Professor, was Head of School, and also held the positions of Australian Gemini and ELT Project Scientists. He moved to Swinburne in 2006