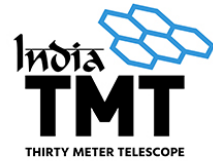




Project: Thirty Meter Telescope (TMT)

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TMT project and role of India



Abstract:

- The Thirty Meter Telescope (TMT) is one of the extremely large telescopes (<https://www.tmt.org/>) that will allow us to see deeper into space and observe cosmic objects with unprecedented sensitivity. The TMT will have three times bigger aperture than currently existing largest visible-light telescopes in the world. The new cutting-edge technology and adaptive optics technique enable TMT to provide unparalleled spatial resolution with images more than 12 times sharper than those from the Hubble Space Telescope. It will provide new observational opportunities in the field of astronomy and astrophysics with various instruments from ultraviolet to mid-infrared. This unique facility will allow astronomers to address fundamental questions in astronomy ranging from understanding planets and star formation to unraveling history of galaxies and large-scale structure in the Universe. India-TMT has initiated many work-packages towards manufacturing of the primary mirror of the telescope, software and back-end instruments.

About the Speaker:

- Shashi Bhushan Pandey is an optical astronomer at Aryabhata Research Institute of Observational Sciences (ARIES), Nainital. Dr. Pandey was awarded his PhD degree in 2006 for working towards energetic stellar explosions like Gamma-ray bursts and Supernovae. Apart from his core scientific activities, Dr. Pandey is actively involved towards developments of the 1.3m optical telescope, the 3.6m Devasthal Optical Telescope and back-end instruments like 4Kx4K CCD Imager. On behalf of ARIES, one of the PI institutes of India-TMT, Dr. Pandey is involved towards various aspects of the TMT project since very beginning including prototypes of Segment Support Assemblies within India and other work-packages. Dr. Pandey has also represented member of Scientific Advisory Committee on behalf of India-TMT and many other committees to get the project evolved within the country to its present form.

