

Project: Thirty Meter Telescope (TMT) Dr. Ravinder S. Bhatia, Associate Project Manager, TMT Project Thirty Meter Telescope



Abstract:

• The Thirty Meter Telescope (TMT) represents the next generation of ground-based astronomical observatories. Driven by frontier science themes, TMT will offer 10 times the light-gathering power of the largest existing ground-based optical/near-infrared facilities, and will produce images 10 times more detailed than the Hubble Space Telescope. With this tremendous increase in power, TMT will deliver as yet unforeseen, groundbreaking discoveries about the Universe. TMT will herald a new generation of telescopes and will serve its partner communities as a flagship research facility. TMT is an international partnership involving India, the USA, Canada, Japan, and China. In this talk I will provide an overview of the scientific goals and technical architecture of the observatory. I will also provide a status report on the construction activities.

About the Speaker:

• Dr. Ravinder S. Bhatia is Associate Project Manager for the Thirty Meter Telescope. He has worked on international collaborations in technology development for over twenty years in astronomy, Earth observation and oceanography. Previously, he was Project Systems Engineer for the \$1.2 billion Atacama Large Millimeter/submillimeter Array (ALMA) in Chile. He was Senior Thermal/Cryogenics Engineer for the European Space Agency, where he worked on the Planck Space Telescope, the MIRI camera for the James Webb Space Telescope, and also served as Technical Officer for technology research and development contracts across Europe. He was Visiting Research Fellow at the UK National Oceanography Centre. As Senior Postdoctoral Scholar at Caltech's Division of Physics, Mathematics and Astronomy, his research focused on developing instruments to measure the Cosmic Microwave Background. Ravinder Bhatia gained his Bachelor's degree in Aeronautics from Imperial College (1991), his Ph.D. in Experimental Astrophysics and Aerospace Engineering from Queen Mary College (1998), and his Master's degree in International Relations from Cambridge University (2005).

