

Indian Institute of Space Science and Technology

Valiamala, Thiruvananthapuram

NEW PARADIGMS FOR TECHNICAL EDUCATION IN INDIA: AI AND SCALE

IIST Colloquium



03:30 PM





Indian higher technical education faces some significant new challenges. Prof. Anindya Chatterjee, Department of Mechanical Engineering, IIT Kanpur will speak about two of them. One is the growth of Artificial Intelligence (AI), and the other is one of scale: increasing enrollments, huge numbers of applicants, growing complexity and difficulty of tasks that faculty members are expected to excel on. While the future is unknown, some trends seem clear and can be extrapolated.

With this view, the talk will address the fundamental ways in which Al will affect engineering work, how we can adapt our teaching philosophy to help prepare our STEM students for such work, what the global aspects of scale seem to be, how it might affect us, and how our teachers and researchers in higher educational institutions might try to improve their overall effectiveness and contribution.

Since the range of possibilities is large, the structure of the talk will use the following five points: Al is coming and it will change the workplace; we must inculcate broad useful transferable skills those are hard for AI to copy; Our demographics promise huge challenges of scale; there is an international context to that scale; we must scale up our effectiveness and we need work.



About the speaker: Prof. Anindya Chatterjee is a mechanical engineer with an undergraduate degree from IIT Kharagpur, masters degrees in applied mechanics and applied mathematics from the University of Florida, a PhD from Cornell University, and postdoc work at Penn State University. He spent a year, just out of college, working for Telco (now Tata Motors) in Jamshedpur. He joined the Indian Institute of Science in 2000, moved to IIT Kharagpur in 2009, and to IIT Kanpur in 2012.

