

# Tata Institute of Fundamental Research

Homi Bhabha Road, Colaba, Mumbai, INDIA, 400005



## ASET Colloquium

### **Topic: The exciting applications of Machine learning in Science**

Modern methods of machine learning (ML) represent perhaps the most significant recent developments in computational science, with the potential to impact nearly every aspect of our lives. ML is a very powerful technique, capable of absorbing vast and dissimilar datasets, making sense of them and producing remarkable predictions. ML derives some of its versatility and power from its inherent non-linearity, which consequently makes it very challenging to interpret, more specifically to appreciate what exactly these machines are learning. In this talk, I will give an overview of the method, describe its applications and how science broadly stands to benefit.

**Speaker: Dr. Shravan Hanasoge, Department of Astronomy and Astrophysics, TIFR, Mumbai**

Shravan Hanasoge joined the Department of Astronomy and Astrophysics at the Tata Institute of Fundamental Research, Mumbai, as a faculty member in 2013. He received his Ph.D. at Stanford University, where he worked with the Solar Group on developing computational techniques to enable the seismology of the solar interior. He then pursued a postdoctoral fellowship at the Max-Planck Institute for Solar System Research and the Department of Geosciences, Princeton University, with appointments as a visiting scholar at Courant Institute of Mathematical Science and an Associate fellow of the Princeton Center for Theoretical Science. He has a Bachelor's degree in Aerospace Engineering from Indian Institute of Technology, Madras and a Masters from Stanford University.



**Date & Time: Friday, 6<sup>th</sup> September 2019, 4pm**

**Venue: Main Lecture Theatre (AG-66), TIFR, Mumbai**

*This talk is open to all, please carry your photo ID card. For further details, please email to 'aset@tifr.res.in' or call +91-9987537702.*