



INTERNATIONAL
CENTRE *for*
THEORETICAL
SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Seminar

- Title** : Consumer-resource models: mechanistic insights into microbial community ecology
- Speaker** : Akshit Goyal (Massachusetts Institute of Technology, USA)
- Date** : Tuesday, 05th April, 2022
- Time** : 03:30 pm (IST)
- Abstract** : The Lotka-Volterra model has remained the workhorse of ecologists for 100 years, providing by far the simplest framework to include species-species interactions and their consequences. However, resource environments are dynamic, and as they change, so do species interactions, especially in microbial ecosystems. The effects of resources remain difficult to incorporate in the Lotka-Volterra picture, and are more suited to an alternative conceptual approach — the consumer-resource framework — which explicitly models resource dynamics and their coupling to species. I will show how new biological data from microbiomes is aiding the development of consumer-resource models, and highlight new ecological behaviors these models explain, as well as some of their predictions.
- Venue** : Please click on the below link to join the meeting
<https://icts-res-in.zoom.us/j/88188679397?pwd=UnVyVExwZUxCS1I3c3RTM3ZNVTRuUT09>
Meeting ID: 881 8867 9397
Passcode: 040405

International Centre for Theoretical Sciences - TIFR
Survey No. 151, Shivakote Village, Hesarghatta Hobli, Bengaluru (North) -
560089 Tel: +91 80 4653 6000 Fax: +91 80 4653 6002
Email: academicoffice@icts.res.in Website: www.icts.res.in