

## **Inter-IISER Ecology Meet**

### **Impacts of Global Environmental and Anthropogenic Changes on Animals and Ecosystems**

Dates: 26<sup>th</sup>, 27<sup>th</sup>, 28<sup>th</sup> January 2024

Location: IISER Tirupati (Permanent campus)

A gathering of 20 Ecology faculty members from various IISERs, along with CCMB, TIFR-H, and KREA University. The meeting includes engaging in discussions on science, encouraging interactions at the student level, and planning effective teaching strategies for Ecology.

The main goal of the meeting is to create a platform for faculty and students working in Ecology to connect, discuss research, and explore opportunities for collaboration in both research and teaching—the two key pillars of IISERs.

The meeting hosts numerous faculty and student-led research talks and a poster session, covering various ecological aspects. Additionally, participants can engage in themed discussions, nature walks, early morning and nocturnal birding, and mammal watching. The venue, adjacent to the Sri Venkateshwara National Park, experiences diverse and rich wildlife. Moreover, there are optional outing possibilities, such as Pulicat Lake, Mamanduru wet woodland, Kalyani Dam: Pulibonu - Safari route, Tirumala, etc.

- Animal behavior and communication
  1. Color Preference of Indian Free-ranging Dogs
  2. Dear enemy or nasty neighbors: examining territoriality in Jungle Babblers
  3. More than just babble: syntax and semantics in Jungle Babbler vocalizations
  4. Assessing the relationship between cultural dialects in birdsong and genetic population structure in a species endemic to the Shola Sky Islands of the Western Ghats.
  
- Biotic interactions and species dynamics
  1. Ants in battle: Colony relocation and fitness consequences
  2. Genetic diversity varies with species traits and latitude in predatory soil arthropods
  3. Intraspecific variation in avian haemosporidian infection in a cooperative passerine, Jungle Babbler.
  4. The disease ecology of sky island birds: How prevalent is the avian Haemosporidia in the sholas
  5. Genetic differentiation in birds across two biogeographic barriers in the Western Ghats
  6. Environment modifies the effect of soil microbes on plant species' coexistence
  7. Does insect herbivory contribute to density-dependent seedling dynamics in a tropical forest
  
- Ecological patterns and diversity
  1. Range-restricted old and young lineages show the southern Western Ghats to be both a museum and a cradle of diversity for woody plants

2. Idiosyncrasies unveiled: examining the pace, patterns, and predictors of biotic diversification in peninsular India
  3. Climate strongly shapes species distribution and assembly of plant communities in the Eastern Ghats
- Ecological methodologies
    1. A novel method for predicting ecological interactions with the unsupervised machine learning algorithm
    2. Citizen Science
  - Climate and environmental impact
    1. Responses of butterflies to temperature

Requirements:

Poster specifications

1. Posters should be of A0 size.
2. Please balance content and white space, which would allow readers to go through the poster with breaks while the flow of information is intact.
3. Presenters can add QR codes to redirect the audience to web pages containing references or contact information pages.
4. Please affix your posters to the designated area, preferably on the 27th Morning before the talks start.
- 5.

Talk specification

1. The talks are divided into two groups: The student talks will be of 15 minutes followed by 5 minutes of discussion whereas the faculty talks will be of 25 minutes and 5 minutes of discussion.
2. Please provide your presentation to the facilitators before 15 minutes of the allotted sessions.

3. If video files are embedded in the presentation, please provide the folder with both the presentation and the linked video.