E&B Seminar Series

SCHOOL OF BIOLOGICAL SCIENCES THE UNIVERSITY OF HONG KONG 香港大學生物科學學院 SHKU Science

ECOLOGY & BIODIVERSITY

Global Arthropod beta-diversity is spatially and temporally structured by latitude

Date	**Mar 15th (Fri.)**
Time	**16:00 (UTC+8)**
Venue	**3N01 & Zoom**

This talk discusses global arthropod biodiversity dynamics using a beta-diversity framework. Malaise traps were deployed in 129 sampling sites to monitor spatiotemporal changes in arthropod communities. Between-site differences in community diversity were assessed using beta-diversity and the partitioned components of species replacement and richness difference. Our findings show that global total beta-diversity increased with decreasing latitude, greater spatial distance, and greater temporal distance. Species replacement and richness difference patterns varied across biogeographic regions. This study supports general expectations of global biodiversity patterns, but also shows that the underlying processes driving patterns may be regionally linked.

About speaker:

Mat is an Assistant Professor of environmental DNA at Hong Kong University. With a background in metacommunity/molecular ecology, he specializes in using molecular tools for biomonitoring and studying biodiversity dynamics. Mat has extensive experience working in various habitats, including freshwater, coastal, marine, and terrestrial environments. He collaborates with international partners to investigate the drivers of biodiversity, the impact of environmental changes on community health, and the connections to human society. His research aims to provide insights into the stability and conservation of natural communities in the face of global challenges.