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Terrestrial Biodiversity and Ecosystems

Integrative Network Ecology: A Synthesis of Behavioural and Community Ecology, and A New Paradigm for Understanding Biodiversity



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Venue: Auditorium, 1st Floor

Interdisciplinary Research Building

跨領域科技研究大樓 1樓演講廳

Host: Dr. Sheng-Feng Shen 沈聖峰研究員

Online Seminar 視訊演講



Abstract

Biodiversity research has tended to focus on species diversity. However, species do not exist in isolation. Instead, they interact with each other to form complex ecological networks. It is such an interactive context in which species coexist and ecosystem functions emerge. Therefore, to better understand and manage biodiversity, it is important to understand the underpinning behavioural mechanisms that drive species interactions and shape network patterns. In my presentation, I review empirical and theoretical approaches that have been applied to study ecological networks. I highlight how behaviour can be incorporated into the framework of network ecology to achieve an efficient integration of organism-level and community-level ecology, while allowing empirical and theoretical studies to reinforce each other. I finish with summarising the future scope of this field, both in terms of making scientific advances and handling biodiversity-related real-world challenges.