

The levels of Power: From individual behavioral strategies to systemic social inequality

Wednesday 1st, 11am to 1pm

Speakers:

Danai Papageorgiou

Bonaventura Majolo

Leveda Cheng

Romain Ligneul (to confirm)

Dan Redhead

Overview :

Understanding the causes and consequences of social inequality has been a long-standing puzzle among behavioural ecologists and evolutionary anthropologists. In group-living animals, competition for resources, such as food or mating opportunities, is often structured by dominance hierarchies. While extensive research has examined the social and fitness correlates of individual rank, the evolutionary origins of social inequalities and power asymmetries remain largely unexplored. In particular, we lack a clear understanding of why animal societies exhibit such striking diversity in social organisation and structure, ranging from egalitarian to highly despotic, and why hierarchies differ in the steepness of power differentials between individuals that occupy adjacent ranks. Across taxa, individuals face recurrent challenges in navigating dominance hierarchies, negotiating access to resources, and balancing competition with cooperation. Variation in dominance style along the egalitarian–despotic gradient influences not only the expression of aggression and affiliation, but also the long-term stability of ranks and the cohesion of social groups.

This symposium will bring together researchers investigating how and why individuals direct aggression and affiliation toward particular partners, and how such interactions scale up to shape social dynamics, network properties, and group functioning. We invite contributions that explore the socio-ecological, genetic, and cultural drivers of variation in power structures, as well as their evolutionary consequences. Approaches may be empirical, theoretical, comparative, or based on simulations. By highlighting novel concepts, methodologies, and tools for studying the complex, multilevel nature of power relationships, this symposium seeks to generate fresh insights into the underpinnings of mammalian social complexity, offering a comparative framework to better understand the evolutionary roots of inequality and dominance hierarchies.

Organizers: Eve Davidian, Dan Redhead