

**Speaker:**

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Date: Monday, Sept. 27, 2021**Time:** 4:00 pm - 4:50 pm**Zoom:** 948 0131 1028**Passcode:** 347039**Title:**

“Is task partitioning associated with parentage in polygyne ants?”

Abstract:

In insect societies, division of labor is essential for colony productivity and fitness. Task partitioning among workers in insect societies may be influenced by many factors, including morphology, age, and physiology. These factors commonly have genetic underpinnings, and there is increasing evidence that a worker's genetic lineage is greatly associated with the tasks they perform in polygyne and polyandrous societies. Species in the ant genus *Formica* are commonly socially polymorphic, meaning that some colonies have a single queen (monogyne) while others have multiple queens (polygyne). Additionally, previous research suggests that worker size is associated with task partitioning in this genus. In order to investigate the role of genetic lineage in task partitioning of *Formica*, we estimated pairwise relatedness among workers of known task and size and used COLONY to infer their parentage.