



Seminar/Talk

The role of intrinsic noise in biological systems: from animal groups to populations to evolution

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Host: Vasudha Kulkarni, Sylvia Cremer

Biological systems are fundamentally shaped by stochasticity. In my talk, I will demonstrate the key role of intrinsic noise, which are fluctuations arising from inherent probabilistic nature of biological interactions and are amplified in finite systems. First, I will demonstrate, using both theory and empirical data, how noise can shape order in small to intermediate-sized fish schools. Next, I will show how noise can inform us about the underlying ecological dynamics. Finally, I will show theoretically how the stochasticity of finite populations can exhibit counter-intuitive dynamics on both ecological and evolutionary time scales.

Wednesday, April 1, 2026 02:00pm - 03:00pm

Mondi Seminar Room 3, Central Building



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