Bioinformatics Seminar Series

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10:30-11:30 at CB207

Contact: Hiroyuki Ogata (ogata@kuicr.kyoto-u.ac.jp)

Marine Viral Dynamics: Lessons from an Imperfect Predator

Joshua S. Weitz
Professor & Co-Director of the Interdisciplinary Ph.D. in Quantitative Biosciences, School of Biological Sciences & Physics, The Georgia Institute of Technology

Viral infections transform the fates of marine microbial cells, populations, and ecosystems. The infection and lysis of individual microbes releases new virus particles and redirects carbon and nutrients back through the microbial loop. Yet, there is increasing evidence that the ecological outcome of infections is often nuanced and does not necessarily end in rapid lysis. Instead, viral infections include a spectrum of fates including latency, inefficient infections, and infections that fail inside cells. This talk combines insights from mathematical models and field-based evidence to explore how non-lytic outcomes and inefficient infection shapes the influence of marine viruses on microbial populations and ecosystem functioning.