

# COLLOQUIUM

## STABILITY OF HOST-PARASITOID SYSTEMS

### [ABSTRACT]

Understanding the mechanisms driving predator-prey population dynamics and stability has been a central theme in the field of ecology. Although theoretical models developed over the past quarter century have demonstrated that predator-prey population dynamics can depend critically on age (stage) structure and duration and variability in development times of different life stages, unambiguous experimental support for this theory is nonexistent. We conducted an experiment with the cowpea weevil *Callosobruchus maculatus*, and its parasitoid *Anisopteromalus calandrae*, to test the prediction that increased variability in the development time of the host stage that is vulnerable to parasitism can promote interaction stability. In this talk, I am going to present first some stability results of host-parasitoid systems and then some model simulations by fitting to our lab data



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