
Seminar 2015

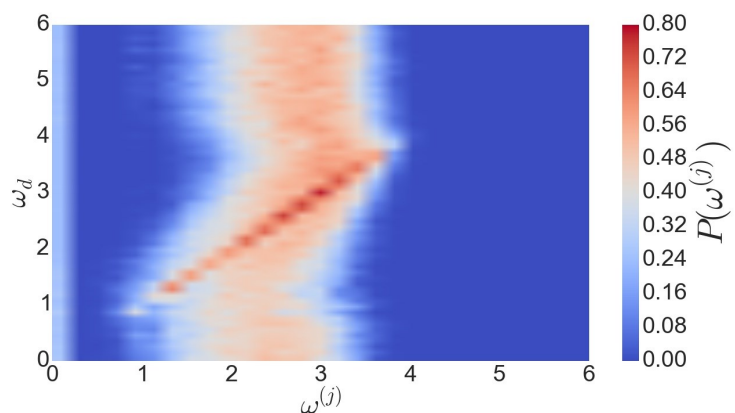
"Boltzmann's Dog and Darwin's Finch: Nonequilibrium statistical mechanics of self-replication and evolutionary adaptation."



Jeremy L. England
Thomas D. & Virginia W.
Cabot Career Development
Department of Physics
MIT

Friday October 2, 2015
2:30 PM
Laufer Center Lecture Hall 101
Host: Jason Wagoner

Living things operate according to well-known physical laws, yet it is challenging to discern specific, non-trivial consequences of these constraints for how an organism that is a product of evolution must behave. Part of the difficulty here is that life lives very far from thermal equilibrium, where many of our traditional theoretical tools fail us. However, recent developments in nonequilibrium statistical mechanics may help light a way forward. The goal of this talk will be to explain some of these developments, and show how they begin to offer a new perspective on the physics of self-replication, natural selection, and evolution.



Refreshments following seminar
Laufer Hub 110