



Department of Biomathematics Seminar Series:
Frontiers in Systems and Integrative Biology

BIO
MATH

Stochastic Processes at Single-Molecule and Single-Cell Levels



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ABSTRACT:

Due to the advance of single-molecule techniques, stochastic phenomena in chemistry and biology have been widely observed, which promotes the rapid development of stochastic modeling. I will discuss several stochastic processes in single-molecule enzyme kinetics, transcriptional burst and toggle switch. The stochastic modeling not only can explain some unexpected law from the trajectory perspective, but also can help uncover certain molecular mechanism and carefully analyze the effect of noise within gene regulation.

Host: Tom Chou, Ph.D.

To receive e-mail seminar notices, contact David Tomita (dtomita@biomath.ucla.edu)