

## COMPUTATIONAL BIOLOGY WEBINAR @ IMSc

## ADAPTATION IN CHANGING ENVIRONMENTS

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## TUESDAY, 24 NOVEMBER 2020, 3 PM IST

Natural environments are seldom static and therefore it is important to ask how a population adapts in a changing environment. I will consider a stochastically evolving population in which the mutant is beneficial during a part of the seasonal cycle and deleterious in another. The chance that the mutant spreads in the population depends on the instant it arose in the population and described by a time-inhomogeneous backward Fokker-Planck equation. I will discuss our analytical results for the first-passage probability and first-passage time, and their relevance to the evolution of genetic dominance.

> GOOGLE MEET LINK: meet.google.com/hje-tmok-xxf