

# SCMS Seminar



## RECENT WORK ON FIXATION IN RANDOM GENETIC DRIFT

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**Time:** 11:00-12:00 am., Friday, May 23

**Venue:** Room 2201, East Main Guanghai Tower, Handan Campus

**Abstract:** In this talk, I introduce random genetic drift and discuss some recent work in the literature, including my own work, on the way a new gene can become established in a population. Such establishment, known as fixation, is a consequence of a stochastic process that underlies the genetics of finite populations.

$$k_3 = hf(x_{i+1} + \frac{1}{2} \Delta x, x_{i+1} + \frac{1}{2} \Delta x)$$
$$b_i = \frac{a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)}}{\sum_{j=1}^{i-1} a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)}}$$
$$\Delta y_i = \int_{x_i}^{x_{i+1}} y' dx$$
$$\int_{x_k}^{x_{k+1}} f(x, y) dx = \int_{x_k}^{x_{k+1}} y' dx = y(x)$$
$$\sqrt{(y_n + 0.5\tau k_1)^2 + (t_n + 0.5\tau)^2}$$