

Avner Friedman (Ed.)

# Tutorials in Mathematical Biosciences IV

Evolution and Ecology

With Contributions by:

C. Cosner · D. Janies · L.S. Kubatko

Y. Lou · T. Nagylaki

 Springer

**mbi**   
Mathematical Biosciences Institute

---

## Contents

<b>1 Inference of Phylogenetic Trees</b>	
<i>L.S. Kubatho</i> .....	1
<b>2 Large-Scale Phylogenetic Analysis of Emerging Infectious Diseases</b>	
<i>D. Janies and D. Pol</i> .....	39
<b>3 Reaction–Diffusion Equations and Ecological Modeling</b>	
<i>C. Cosner</i> .....	77
<b>4 The Dynamics of Migration–Selection Models</b>	
<i>T. Nagylaki and Y. Lou</i> .....	117
<b>5 Some Challenging Mathematical Problems in Evolution of Dispersal and Population Dynamics</b>	
<i>Y. Lou</i> .....	171