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Sommario/riassunto	This volume contains pedagogical and elementary introductions to genetics for mathematicians and physicists as well as to mathematical models and techniques of population dynamics. It also offers a physicist's perspective on modeling biological processes. Each chapter starts with an overview followed by the recent results obtained by authors. Lectures are self-contained and are devoted to various phenomena such as the evolution of the genetic code and genomes, age-structured populations, demography, sympatric speciation, the Penna model, Lotka-Volterra and other predator-prey models, evolution