

P. Jagers 教授系列报告摘要

(共 8 小时，时间地点另行通知)

Title: Branching Processes and Population Dynamics

Abstract: The contents will be an overview of the area. I will start by discussing various forms of branching processes and move on to the question of extinction or not. Then I will discuss exponential growth, and general multi-type branching processes, and the stabilization of their composition during growth. This includes the stable asymptotic pedigree backwards and hence an interpretation of evolutionary history. Finally, I shall discuss the time to extinction and populations with population size dependence, and show how linear growth can arise. I will also discuss the relation to modern theories of biological evolution. Throughout there will be many biological examples, but few proofs.