1011-92-164 **Mark Kot*** (`kot@amath.washington.edu`), Department of Applied Mathematics, University of Washington, Box 352420, Seattle, WA 98195-2420. *Integrodifference Equations, Invasions, and Branching Random Walks.*

Biological invasions often have dramatic ecological and economic consequences. Thus, there is keen interest in models that correctly predict rates of spread of invading organisms. In this talk, I discuss the formulation and analysis of integrodifference equations, link deterministic integrodifference equations to stochastic branching random walks, and show how these models shed light on the rate of spread of invading organisms. (Received August 24, 2005)