

1077-P1-1288 **Matthew Glomski*** (matthew.glomski@marist.edu), Department of Mathematics, Marist College, 3399 North Road, Poughkeepsie, NY 12601. *Mathematical epidemiology without differential equations*. Preliminary report.

Differential equations have proved an effective tool in modeling the spread of infectious diseases. But can students in math and biology begin to address fundamental questions in mathematical epidemiology before having mastered differential equations—or even integral calculus? In this talk we will discuss two fundamental discrete models, each appropriate for inclusion in the "pre-DE" classroom. (Received September 18, 2011)