

1039-37-14

Hal L. Smith* (halsmith@asu.edu), Tempe, AZ, and **M. W. Hirsch** and **German Enciso**.
Prevalent Behavior of Strongly Order Preserving Semiflows.

Classical results in the theory of monotone semiflows give sufficient conditions for the generic solution to converge toward an equilibrium or towards the set of equilibria (quasiconvergence). In this talk, we provide new formulations of these results in terms of the measure-theoretic notion of prevalence, developed in by Christensen(1972) and Yorke et al.(1992). For monotone reaction-diffusion systems with Neumann boundary conditions on convex domains, we show the prevalence of the set of continuous initial conditions corresponding to solutions that converge to a spatially homogeneous equilibrium. (Received January 31, 2008)