1077-35-655   **Juraj Foldes*** (`juraj.foldes@vanderbilt.edu`). *Asymptotic properties of perturbed parabolic equations.*

Positive solutions of nonlinear parabolic problems can have very complex behavior. However, assuming certain symmetry conditions, it is possible to prove that the solutions converge to the space of symmetric functions. We show that this property is 'stable'. More specifically if the symmetry conditions are replaced by asymptotically symmetric ones, the solutions still approach the space of symmetric functions. We discuss problems on bounded and unbounded domains and,by possibly surprising counterexamples, we show optimality of our assumptions. As an application, we formulate new results on convergence of solutions to a single equilibrium. (Received September 09, 2011)