

1146-35-214

Kwadwo Antwi-Fordjour* (kantwifo@samford.edu) and **Marius Nkashama**. *Global Existence of Solutions of the Gierer-Meinhardt System with Mixed Boundary Conditions*.

Gierer-Meinhardt system is one of the famous models studied in biological spatial pattern formation based on Turing's idea. In this talk, we employ analytic semigroup and a priori estimates to show the local and global existence of positive solutions for the Gierer-Meinhardt system. Robin boundary and Neumann boundary conditions are used on the activator and the inhibitor concentrations respectively. (Received January 22, 2019)