

1131-35-220

Du Pham* (du.pham@utsa.edu), Mathematics Department, University of Texas at San Antonio, One UTSA Circle, San Antonio, TX 78249. *Existence and Uniqueness Results for Shigesada-Kawasaki-Teramoto Equations.*

In this talk, we present new results of existence and uniqueness of weak solutions to the Shigesada-Kawasaki-Teramoto (SKT) systems. The existence result is established using maximum principles, finite differences in time and compactness results. Our proof of uniqueness is accomplished using the adjoint problem argument. All these results are valid in space dimension $d \leq 4$. (Received July 15, 2017)