

1079-51-294

**Sukanya Basu\*** ([basus@gvsu.edu](mailto:basus@gvsu.edu)), Grand Valley State University, A-2-136 Mackinac Hall, 1  
Campus Drive, Allendale, MI 49401-6495. *On the Connection between a Class of Discrete  
Dynamical Systems and Some Plane Algebraic Curves.*

We will analyze the global behavior of solutions to a class of nonlinear discrete dynamical systems with applications in the natural sciences. In particular, we will show that the global dynamics of these solutions are determined by certain plane algebraic curves. (Received January 17, 2012)