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**Elliott J. Bertrand\***, Department of Mathematics, University of Rhode Island, 5 Lippitt Road, Kingston, RI 02881, and **Mustafa R.S. Kulenovic**. *Global Dynamic Scenarios for Competitive Maps in the Plane*.

In this presentation we will discuss some possible global dynamic scenarios for general competitive maps in the plane. We apply these results to the class of second-order autonomous difference equations whose transition functions are decreasing in the variable  $x_n$  and increasing in the variable  $x_{n-1}$ . We illustrate our results with the application to the difference equation

$$x_{n+1} = \frac{Cx_{n-1}^2 + Ex_{n-1}}{ax_n^2 + dx_n + f}, \quad n = 0, 1, 2, \dots,$$

where the initial conditions  $x_{-1}$  and  $x_0$  are arbitrary nonnegative numbers such that the solution is well-defined and the parameters satisfy  $C, E, a, d, f \geq 0$ ,  $C + E > 0$ ,  $a + C > 0$ , and  $a + d > 0$ . We characterize the global dynamics of this equation with the basins of attraction of its equilibria and periodic solutions. (Received September 25, 2017)