

1023-34-803

Jo Hoffacker* (johoff@clemsun.edu), 102 Larkspur Ln, Pendleton, SC 29670, and **Doug Anderson.** *On the number of positive periodic solutions of functional dynamic equations on time scales and population models.*

In this talk we employ the fixed point index on cones to examine the number of positive periodic solutions to the system of dynamic equations on time scales

$$x^\Delta(t) = A(t)x(\sigma(t)) + \lambda f(t, x(t - \tau(t)))$$

in which $\lambda > 0$ is a parameter. In addition we examine several population models. (Received September 21, 2006)