1014-34-312Haiyan Wang* (wangh@asu.edu), Math Sciences and Applied Computing, Arizona State
University, Phoenix, AZ 85069. Nonlinear Systems of Differential Equations.

In this talk we will discuss the existence of positive solutions for nonlinear systems of differential equations based on new concepts of superlinearity and sublinearity for systems of differential equations. I will also present several new results for the existence of convex solutions of differential equations. (Received September 08, 2005)