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PERSISTENCE, GLOBAL STABILITY AND ATTRACTOR SIZE FOR DELAY  
DIFFERENTIAL EQUATIONS

**Daniel Franco**

The talk will have two parts. In the first one, we will present a new approach to study the global stability of difference equations and we will show how this approach can be used to extend and complement certain dichotomy results for delay equations. In the second part, we will show how a class of forced positive nonlinear delay-differential systems can be seen as feedback control systems. Then, we will provide conditions under which the states of these models are persistent and conditions under which the non-zero steady state is stable in a sense developed in control theory.

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