1046-37-711 **Basilio Messano*** (messano@unina.it), University of Napoli, Department of Mathematics, Napoli, Italy. *Globally Stable Equilibria.*

The first part of this talk deals with dynamical systems governed by a function

$$F\colon [0,1]\times[0,1] = Q \to Q$$

under the hypothesis that $F(x,y) = (f(x,y),x)$ with $f\colon Q \to [0,1]$ continuous and increasing with respect to y. It is shown that if the set Fix$F$ of fixed points of F is totally disconnected and F does not have any periodic orbits of period 2, then for all $(x,y)\in Q$ the sequence $\{F^n(x,y),\ n=0,1,\dots\}$ converges to a point of Fix$F$.

The second part of the talk deals with dynamical systems of the form (triangular)

$$F(\mathbf{x}) = (f_1(x_1), f_2(x_1,x_2),\dots,f_q(x_1,\dots,x_q)) + \mathbf{x}_I$$

where $\mathbf{x}_I \in \mathbf{R}^q$, and the functions $f_i,\ i=1,\dots,q$ are uniformly continuous. We assume that F has one and only one fixed point $\mathbf{x}_s$. Conditions are given that imply the global stability of the dynamical system governed by F, i.e. the convergence to $\mathbf{x}_s$ of all sequences of iterates of the function F regardless of their initial state. (Received September 10, 2008)