

Meeting: 1006, Lubbock, Texas, SS 11A, Special Session on Future Directions in Mathematical Systems and Control Theory

1006-93-34 **Clyde F. Martin*** (martin@math.ttu.edu), Department of Mathematics, Texas Tech University, Lubbock, TX 79409. *Observability of Complex Systems*. Preliminary report.

We consider the observability of the system $\dot{x} = Ax$ by a polynomial $y = p(x)$ where y is a complex scalar and x is a complex n -vector. We show that there are fundamental differences between the classical real case and this complex case. (Received January 18, 2005)