

1062-39-10

Gabriel Lugo and **Frank J. Palladino***, University of Rhode Island, Department of Mathematics, 5 Lippitt Road, Kingston, RI 02881. *Local Stability and the m-M theorem*. Preliminary report.

We prove a lemma that gives global asymptotic stability of an equilibrium under appropriate hypotheses. This lemma may be used to strengthen the consequences of the m-M theorem without additional hypotheses. (Received May 14, 2010)