

1014-34-344

Martin Golubitsky* (mg@uh.edu), Department of Mathematics, University of Houston, Houston, TX 77204-3008, and **Maria C.A. Leite**. *Dynamics in Small Networks of Identical Coupled Systems*. Preliminary report.

There are many special features that occur generically in the dynamics of small networks. The situation is reminiscent of the dynamics in equivariant systems, but here the special mathematical structure is due to the coupling of *identical* systems of differential equations. We discuss several of the surprising examples of generic bifurcations that occur in networks of just three identical systems. (Received September 12, 2005)