Meeting: 1006, Lubbock, Texas, SS 7A, Special Session on Topology of Dynamical Systems

1006-54-215 C Good* (c.good@bham.ac.uk), School of Mathematics, University of Birmingham, B15 2TT Birmingham, England. *Topologizing sets so that a given self map is continuous*. Preliminary report.

Given a map $f: X \to X$ on a set X, i.e. an abstract dynamical system, when can one put an interesting topology on X with respect to which the map f is continuous?

We mention some positive results and show that the question is often a hard one. For example, we have a complete characterization for the compact Hausdorff case, whereas the compact metric case is difficult.

The results are joint work with Greenwood, Knight, MacIntyre and Watson. (Received February 15, 2005)