1006-54-154   **Rolf Suabedissen*** (`rolf.suabedissen@bnc.ox.ac.uk`), Brasenose College, OX1 4AJ Oxford, England. *The structure of* **R***-actions.* Preliminary report.

Given an **R**-action on a compact Hausdorff space we investigate necessary and sufficient conditions on the orbit spectrum, the set of all occurring periods. The main results are the following: Provided the action is pointwise periodic the orbit spectrum must be compact in the co-compact topology on the hyperspace of **R**. If, on the other hand, no periodic orbits exists then there are at least continuum many orbits. (Received February 14, 2005)