## 1044-54-189 Alan Dow\* (adow@uncc.edu), Mathematics and Statistics, UNC Charlotte, Charlotte, NC 28223. Forcing and non-trivial copies of $\beta \omega \setminus \omega$ . Preliminary report.

We continue a line of research begun by Velickovic, Steprans and Shelah in which models of Martin's Axiom are created by forcing over a model of PFA. The forcing posets are designed to add new ultrafilters on  $\omega$  or maps on  $\omega^*$  without adding new subsets of  $\omega$ .

A long-standing open question by van Douwen asks if there exist homeomorphic copies of  $\omega^*$  which are not merely the remainders of countable discrete sets. We consider this question in some of these special models. (Received September 01, 2008)