

1078-08-405

**Agnes Szendrei\*** ([szendrei@euclid.colorado.edu](mailto:szendrei@euclid.colorado.edu)). *Separating clones near the top of the clone lattice*. Preliminary report.

Let  $\mathcal{O}$  be the clone of all operations on a finite set  $A$  with at least three elements. For a finitely generated subclone  $\mathcal{Q}$  of  $\mathcal{O}$ , the clones  $\mathcal{C} (\subseteq \mathcal{O})$  not containing  $\mathcal{Q}$  can be best classified by finding a manageable (finite) set  $R$  of relations on  $A$  such that for every clone  $\mathcal{C} (\subseteq \mathcal{O})$  we have  $\mathcal{C} \not\supseteq \mathcal{Q}$  iff for some  $\rho \in R$  all operations in  $\mathcal{C}$  preserve  $\rho$ . The aim of the talk is to discuss separation theorems of this kind for some clones  $\mathcal{Q}$  near the top of the clone lattice. (Received December 13, 2011)