1113-13-155   **Eric Edo** and **Drew Lewis*** (`dlewis@ua.edu`), Department of Mathematics, University of Alabama, Campus Box 870350, Tuscaloosa, AL 35487. *Cotame automorphisms of polynomial rings.* Preliminary report.

An automorphism of the polynomial ring $\mathbb{C}[x_1, \ldots, x_n]$ is called tame if it is generated by affine and elementary (i.e. those that fix $n-1$ variables) automorphisms. The subgroup of tame automorphisms is a well studied object; however, the notion of *cotame automorphisms*, automorphisms which together with the affine subgroup generate the entire tame subgroup, is a relatively new area of research. Surprisingly, many automorphisms are cotame. In this part-survey talk, we will go through the short history of this problem of identifying cotame automorphisms, including a new result proving the existence of automorphisms which are tame but not cotame. (Received August 19, 2015)