1024-20-129   **Alexander J Hulpke*** (`hulpke@math.colostate.edu`), 1874 Campus Delivery, Fort Collins, CO 80523. *Normalizer Calculations in Permutation Groups — Theme and Variations.* Preliminary report.

Calculating the normalizer $N_G(U)$ of a subgroup $U \leq G \leq S_n$ of a permutation group is a fundamental, but hard (i.e. no general polynomial time algorithm exists) operation. Methods proposed (and used) come from all areas of computational group theory. I plan to give a brief survey over these existing methods and to present a new method, based on determining shape-preserving automorphisms, which seems to perform well in the critical case of U elementary abelian. Such a method could become a step towards an inductive method for normalizer calculations. (Received January 05, 2007)