1023-20-1070   **Alexandra R Pettet*** (`apettet@math.stanford.edu`), Stanford University, Mathematics, Bldg 380, 450 Serra Mall, Stanford, CA 94305-2125. *Cohomology of some subgroups of the automorphism group of a free group.*

IA_n is the subgroup of $\mathrm{Aut}(F_n)$ which acts trivially on the homology of the free group and is thus an analogue for the Torelli subgroup of the mapping class group of a surface. We implement different methods for studying cohomology of IA_n and one of its subgroups. (Received September 25, 2006)