

**TRENTO, 2022/23**  
**ADVANCED GROUP THEORY**  
**EXERCISE SHEET # 13**

*Exercise 13.1.* State and prove the main theorem of Clifford theory.

*Exercise 13.2.* Show an application of Clifford theory to either  $A_5 \trianglelefteq S_5$  (as sketched in the notes) or the nonabelian group of order 21.