

# 1 The Alternating Groups

## 1.1 Introduction

$\text{Aut}(A_n) \cong S_n$  for  $n \geq 7$  but for  $n = 6$  there is an exceptional outer automorphism of  $S_6$ .hahahssww  
subgroup structure (O’Nan-Scott Thm) ddsss hahah