

Title: Finite Groups of Derangements on the n -Cube II

Oscar and I have been able to prove the following theorem: If G is a finite group of order q and $\gcd(q, k) = 2^s$ for some s , then G acts as a group of symmetries on some n -cube in such a way that it acts freely on the set of k -faces. I will discuss the techniques we used to prove this theorem. Time permitting, I will wade into some murkier water.