## On the Normality of Cayley Graphs of Abelian Groups

Mehdi Alaeiyan

Department of Mathematics

Iran University of

Science and Technology

Narmak, Tehran 16844, Iran

alaeiyan@iust.ac.ir

## Abstract

For a group G, and a subset S of G such that  $1_G \notin S$ , let  $\Gamma = Cay(G, S)$  be a Cayley graph. Then  $\Gamma$  is said to be normal, if the right regular representation G is normal in  $Aut(\Gamma)$ . In this paper we determine all normal Cayley graphs of abelian group with valency six.