

Lethbridge Number Theory and Combinatorics Seminar

Monday — February 10, 2014

Room: B650

Time: 12:00 to 12:50 p.m.

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Automorphisms of Cayley graphs that respect partitions

Abstract: A Cayley graph $\Gamma = \text{Cay}(G; S)$ on a group G with connection set S , is a graph whose vertices are labelled with the elements of G , with vertices g_1 and g_2 adjacent if $g_1^{-1}g_2 \in S$. We say that an automorphism α of Γ respects the partition \mathcal{C} of the edge set of Γ if for every $C \in \mathcal{C}$, we have $\alpha(C) \in \mathcal{C}$. I will discuss some obvious partitions of the edge set of a Cayley graph Γ , and find conditions under which a graph automorphism of Γ that respects these partitions and fixes a vertex, must be an automorphism of the group G .

EVERYONE IS WELCOME!

Visit the seminar web page at <http://www.cs.uleth.ca/~nathanng/ntcoseminar/>



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