

Lethbridge Number Theory and Combinatorics Seminar

Monday — November 28, 2016

Room: C756

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

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Vertex-primitive digraphs having vertices with almost equal neighbourhoods

Abstract: A permutation group G on Ω is transitive if for every $x, y \in \Omega$ there exists $g \in G$ mapping x to y . The group G is called primitive if, in addition, it preserves no nontrivial partition of Ω . Let Γ be a vertex-primitive digraph, that is, its automorphism group acts primitively on its vertex-set. It is not hard to see that, in this case, Γ cannot have two distinct vertices with equal neighbourhoods, unless Γ is in some sense trivial. I will discuss some recent results about the case when Γ has two vertices with “almost” equal neighbourhoods, and how these results were used to answer a question of Araújo and Cameron about synchronising groups. (This is joint work with Pablo Spiga.)

EVERYONE IS WELCOME!

Visit the seminar web page at

<http://www.cs.uleth.ca/~nathanng/ntcoseminar/>



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