

# Lethbridge Number Theory and Combinatorics Seminar

Monday — October 29, 2018

Room: C630

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

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### Cayley graphs of order $kp$ are hamiltonian for $k < 48$

For every generating set  $S$  of any finite group  $G$ , there is a corresponding Cayley graph  $\text{Cay}(G; S)$ . It was conjectured in the early 1970's that  $\text{Cay}(G; S)$  always has a hamiltonian cycle, but there has been very little progress on this problem. Joint work with Kirsten Wilk has established the conjecture in the special case where the order of  $G$  is  $kp$ , with  $k < 48$  and  $p$  prime. This was not previously known for values of  $k$  in the set  $\{24, 32, 36, 40, 42, 45\}$ .

**EVERYONE IS WELCOME!**

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

