

Lethbridge Number Theory and Combinatorics Seminar

Monday — February 3, 2014

Room: B650

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

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Numerical methods in p -adic linear algebra

Abstract: Standard numerical methods focus on algorithms for matrices over the real and complex numbers: finding singular value decompositions, eigenvalues and eigenvectors, QR and LU decompositions. Many of the same questions make sense for non-archimedean local fields, and some methods carry over. Moreover, the ultrametric properties of p -adic arithmetic allow for much better tracking of precision than in the real and complex cases. This is a report on early stages of joint work with Xavier Caruso, Tristan Vaccon, Jen Balakrishnan and Kiran Kedlaya.

EVERYONE IS WELCOME!

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



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