

Lethbridge Number Theory and Combinatorics Seminar

Monday — October 27, 2014

Room: B660

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

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Linear equations in dense subsets of the squares

Abstract: We discuss the solvability of certain linear equations in sparse subsets of the squares. Specifically, we investigate equations of the form

$$\lambda_1 n_1^2 + \cdots + \lambda_s n_s^2 = 0,$$

where $s \geq 7$ and the coefficients λ_i sum to zero and satisfy certain sign conditions. We show that such equations admit non-trivial solutions in any subset of $[N]$ of density $(\log N)^{-c_s}$, improving upon the previous best of $(\log \log N)^{-c}$.

EVERYONE IS WELCOME!

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



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