Philadelphia Area Number Theory Seminar

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On the Finiteness of Strictly k-regular Quadratic Forms

Abstract: An integral quadratic form is said to be strictly **k**-regular if it primitively represents all quadratic forms of **k** variables that are primitively represented by its genus. We show that, for $\mathbf{k} > 1$, there are nitely many inequivalent positive de nite primitive integral quadratic forms of $\mathbf{k} + 4$ variables that are strictly **k**-regular. This joint work with W.K. Chan extends a recent niteness result of Andrew Earnest et al. (2014) on strictly regular quadratic forms of 4 variables.

Wednesday, October 11, 2017 2:40 { 4:00 PM

Bryn Mawr College Department of Mathematics Park Science Center **337** Tea and refreshments at 2:20PM in Park 339