

Philadelphia Area Number Theory Seminar

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Ziegler's Family of Thue Equations over Imaginary Quadratic Fields

Abstract: Given t , an imaginary quadratic integer of large enough absolute value, Ziegler found all solutions of

$$X^3 - tX^2Y - (t + 1)XY^2 - Y^3 = \mu$$

where μ is a root of unity and X, Y are algebraic integers in $\mathbb{Q}(t)$. In the context of Ziegler's proof, I will give a brief history of parametric families of Thue equations and present a few illuminating properties of such equations.

Wednesday, October 25, 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