

Philadelphia Area Number Theory Seminar

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Using the Hypergeometric Method to Solve Families of Thue Equations.

Abstract: After setting the field and defining some key terms, I will demonstrate how Thue-Siegels hypergeometric method is used by Heuberger (2006) to solve a family of relative Thue equations of the form

$$F_t(X; Y) = X^3 - (t - 1)X^2Y - (t + 2)XY^2 - Y^3 = 0;$$

where t is an imaginary quadratic integer and ϵ is a root of unity in $\mathbf{Q}(t)$. If time permits, I will also discuss how this relates to my current work with Bernadette Faye and Daniel Wisniewski.

Wednesday, August 8, 2018
2:40 { 3:50 PM

Bryn Mawr College
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Park Science Center 338

Tea and refreshments at 2:20PM in Park 339