

# 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

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

where  $t$  is an imaginary quadratic integer and  $\mu$  is a root of unity in  $\mathbb{Q}(t)$ . 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  
Department of Mathematics  
Park Science Center **338**

Tea and refreshments at 2:20PM in Park 339