

# Philadelphia Area Number Theory Seminar

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## Polynomial Splitting and An Application to Number Theory

**Abstract:** It is a theorem of A. Schinzel that for every  $N$ , one can find  $N$  3-tuples of positive integers each having the same sum and each having the same product. In this talk we will discuss a generalization of this result to  $k$ -tuples, where instead of using sum and product we use  $k-1$  elementary symmetric functions. We will be able to translate this problem into an amusing problem about polynomials, which we can solve using techniques from Galois theory and the theory of elliptic curves.

Wednesday, June 17, 2015

2:40–4:00PM

Bryn Mawr College

Department of Mathematics

Park Science Center **328**

Tea and refreshments at 2:20PM in Park 355