

# Philadelphia Area Number Theory Seminar

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## The Inverse Galois Problem with Specified Ramification

Abstract: The inverse Galois problem asks whether every finite group appears as the Galois group of some extension of the rational numbers. In this talk I will focus on which finite groups appear as the Galois group of some extension of the rational numbers in which only a fixed set of primes may ramify. I will present results and examples in some specific cases, with an emphasis on the situation in which only one finite prime ramifies, as well as provide some insight into how the ramified primes in a Galois extension relate to generating sets of the corresponding Galois group.

Wednesday, October 31, 2018  
2:40 – 4:00 PM

Bryn Mawr College  
Department of Mathematics  
Park Science Center 328

Tea and refreshments at 2:20 PM in Park 361