

Philadelphia Area Number Theory Seminar

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Slicing the Stars

Abstract: There will be pictures. We'll discuss the problem of counting the number of algebraic numbers of given degree and bounded height, as the height bound grows. For General algebraic numbers, this was done by Masser and Vaaler, and for algebraic integers by Barroero. Since we count algebraic numbers by counting their minimal polynomials, the problem becomes that of counting lattice points in a certain "star body" whose volume was computed by Chern and Vaaler. We'll talk about how to count algebraic units and more by carefully counting lattice points in "slices" of these star bodies. This is joint work with Joseph Gunther (CUNY).

Wednesday, October 19, 2016
3:10{4:30PM

Bryn Mawr College
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Tea and refreshments at 2:50PM in Park 355