Number Theory Colloquium

Probabilistic Galois theory

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Abstract: A special case of Hilbert's irreducibility theorem says that a "random" degree n polynomial with integer coefficients will have the largest possible Galois group (i.e., the symmetric group on n letters). Historically, the notion of "random" used is that of natural density; the goal of this talk is to discuss alternate approaches that use legitimate probabilistic methods. This will lead us to consider random walks on certain graphs and their connection with the arithmetic of linear algebraic groups.

Thursday, February 17, 2011, 4:00 pm
Mathematics and Science Center: W201

Refreshments at 3:30pm in the MSC Break Room

Mathematics and Computer Science
Emory University