The discriminants of number fields.

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Abstract

The discriminant is one of the first invariants one defines for a number field, but there are still a number of questions about discriminants that we would like to answer. I will survey some of these problems, and discuss an example constructed by L. Dembélé. This is a Galois extension of \( \mathbb{Q} \) whose degree is \( 2^{19} \cdot 3^2 \cdot 5^2 \cdot 17^2 \cdot 257^2 = 2251731094732800 \), whose discriminant is a power of 2, and whose root discriminant is \( \leq 55.4 \).

Wednesday, 12 October 2011
4:00 pm
Smith Hall 204
Tea and refreshments will be served at 3:45pm.