

1058-11-4

**Matthew James Emerton\***, Northwestern University. *Reciprocity laws in number theory.*

In this talk I will describe the evolving notion of a reciprocity law in algebraic number theory, from its beginning with the quadratic reciprocity law to its modern formulation in terms of Galois representations and automorphic forms. I will also explain what is known, and what remains to be proved. (Received July 08, 2009)