

abstract

Joint IAS/PU Number Theory Seminar
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

The theorem of the title is that if the L-function $L(E,s)$ of an elliptic curve E over the rationals vanishes to order $r=0$ or 1 at $s=1$ then the rank of the group of rational points of E equals r and the Tate-Shafarevich group of E is finite. This talk will describe an approach to the converse. The methods are mostly p -adic.