

## Joint IAS/PU Number Theory Seminar

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A Converse to a Theorem of Gross-Zagier-Kolyvagin

Christopher Skinner

Princeton University; Member, School of Mathematics

**Date & Time:** Thu, 04/04/2013 - 16:30 - 17:30

**Location:** S-101

**Video Link:**

<http://video.ias.edu/jointiaspu/1213/0404-ChristopherSkinner>

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.

46030

Dorothea Phares

phares@ias.edu

Tue, 03/19/2013 - 17:59

Mon, 03/25/2013 - 18:04

terms:

- [School of Mathematics](#)