

## **abstract**

JOINT IAS/PU NUMBER THEORY SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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To an abelian variety over a number field one can associate an abelian variety to each prime ideal  $p$  of good reduction by reducing the variety modulo  $p$ . The geometry of these reductions need not resemble the geometry of the original abelian variety; for example, there are absolutely simple abelian varieties of dimension 2 whose reductions modulo  $p$  always split as a product of elliptic curves. In this talk, we shall describe progress on a conjecture of Murty and Patankar which predicts exactly which absolutely simple abelian varieties have reductions modulo  $p$  that are also absolutely simple.