

**Speaker:** Padmavathi Srinivasan

**Title:** Computing Ceresa classes of curves

**Abstract.** The Ceresa class is the image under a cycle class map of a canonical algebraic cycle associated to a curve in its Jacobian. This class vanishes for all hyperelliptic curves, and is known to be non-vanishing for the generic curve of genus at least 3. It is necessary for the Ceresa class to have infinite order for the Galois action on the fundamental group of a curve to have big image. We will present an algorithm for certifying that a curve over a number field has infinite order Ceresa class.

**N.B.** This is preliminary joint work with Jordan Ellenberg, Adam Logan and Akshay Venkatesh.