# Computing $L$-functions of superelliptic curves

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In this talk we discuss an approach for computing the $L$-functions of a curve via stable reduction. We focus on superelliptic curves $Y$ defined over a number field, which are given by an equation $y^n = f(x)$. We compute the stable reduction of $Y$ at primes whose residue characteristic is prime to $n$. We then use this information to compute the local $L$-factor and the exponent of the conductor at $p$.