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**Francesc Castella\*** (fcabello@math.princeton.edu) and **Carl Wang-Erickson**. *Class groups and local indecomposability for non-CM forms.*

In the late 1990s, R. Greenberg (and independently, R. Coleman) asked for a global characterization of those  $p$ -ordinary cuspidal eigenforms of weight  $k > 1$  whose associated  $p$ -adic Galois representation becomes decomposable upon restriction to a decomposition group at  $p$ . It is expected that such  $p$ -ordinary eigenforms are precisely those with complex multiplication by an imaginary quadratic field in which  $p$  splits. In this talk, we will explain a proof that this is indeed the case for forms which are congruent to one with CM, provided that a certain class number is  $p$ -indivisible. Based on joint work with Carl Wang-Erickson. (Received January 25, 2019)