1155-11-111 **Preston Wake*** (wakepres@msu.edu). *Tame derivatives and the Eisenstein ideal.* Preliminary report.

As was made famous by Mazur, the mod-5 Galois representation associated to the elliptic curve X_0(11) is reducible. Less famously, but also noted by Mazur, the mod-25 Galois representation is reducible. We'll talk about this kind of extra reducibility phenomenon more generally, for cuspforms of even weight k and prime level. We'll observe that the characters appearing in the reducible representation are related, on one hand, to an algebraic invariant (the 'tame deriviative' of an L-function), and, on the other hand, to an algebraic invariant (the 'tame L-invariant'). This type of 'algebraic=analytic' relation is predicted by a version of the Bloch-Kato conjecture for families of motives formulated by Kato. (Received January 06, 2020)