DANIEL LE, University of Toronto $mod\ p$ representations of p-adic GL_2

Congruences between automorphic forms and Galois representations have proven to be powerful tools in the Langlands program. The search for a representation-theoretic framework for these congruences naturally leads us to study mod p representations of p-adic groups. Rather little is presently known about the characteristic p case, which seems to be substantially different from other characteristics. We will highlight some recent results and questions in the area, mainly focusing on the case of GL_2 .