

Jacob Lurie: Representation Theory in Intermediate Characteristic

Let G be a finite group. One can study representations of G over any field k : that is, vector spaces over k equipped with an action of G . In general, such representations behave very differently in characteristic zero (where all representations are completely reducible) and in characteristic p (where, if G is a p -group, there are no irreducible representations other than the trivial representation). In these talks, I will discuss representation theory over more exotic "fields" known as Morava K -theories, which in some sense interpolate between fields of characteristic zero and fields of characteristic p , and share many pleasant features of both.