

Bhargav Bhatt: **Perfect algebraic geometry**

I will describe some surprisingly nice features of algebraic geometry in the world of perfect schemes of characteristic p (i.e, schemes where Frobenius is an isomorphism). As an application, we will see why the p -adic analog of the affine Grassmannian is ind-projective (which improves on recent work of X. Zhu). This is based on joint work with P. Scholze.