Jay Pottharst (Boston University). “Applications of triangulation of the eigencurve.”

Abstract: We explain how the triangulation of the eigencurve and related finiteness results, proved in joint work with K.S. Kedlaya and L. Xiao, allows one to $p$-adically interpolate the Selmer groups of the modular forms in the family. This allows one to move questions about the ranks of Selmer groups around in the family, which motivates a conjecture on the geometry of the eigencurve.