

RESEARCH STATEMENT OF KEVIN WORTMAN

My research involves the geometry of arithmetic groups – such as $\mathrm{SL}(n, \mathbf{Z})$ – and related groups – such as $\mathrm{SL}(n, \mathbf{Z}[1/p])$, $\mathrm{SL}(n, \mathbf{F}[t])$ where \mathbf{F} is a finite field, $\mathrm{SL}(n, \mathbf{Z}[t])$, and groups that act naturally as noncompact lattices on $\mathrm{CAT}(0)$ spaces.

Recently I have been interested in questions about the cohomology of groups through geometric methods, and about isoperimetric inequalities for the groups listed above.