

1145-58-839

Pierre Albin* (palbin@illinois.edu), 1409 West Green St, Urbana, IL 61801. *On the Hodge theory of stratified spaces.*

I will discuss recent work with collaborators on analysis on singular spaces. These spaces show up naturally even when studying smooth objects, e.g., as algebraic varieties or orbit spaces of group actions. I will discuss how these analytic tools allow us to study the signature of stratified spaces. Time permitting I will discuss applications to the Novikov conjecture and to the Atiyah-Singer index theorem. (Received September 16, 2018)