

1027-14-136

Jarod D. Alper* (jarod@math.stanford.edu), Department of Mathematics, Stanford University, Building 380, Stanford, CA 94305. *Are Artin stacks locally quotient stacks?* Preliminary report.

I will present current research on attempting to determine the local structure of Artin stacks. Quotient stacks form an important subclass of Artin stacks and it is an interesting problem to understand the relationship between quotient stacks and Artin stacks. I will describe a theorem which states that Artin stacks over a field are locally quotient stacks around points with linearly reductive stabilizer. I hope to discuss generalizations and potential applications of this result. (Received February 24, 2007)