Some results on antichains

Guoli Ding

Department of Mathematics
Louisiana State University
ding@math.lsu.edu

Abstract. We consider the following two problems:

1. If a poset has infinite antichains, then there is an infinite antichain A such that excluding elements in A results in a poset with no infinite antichains. Now the question is: given such an antichain, is there a better one?

2. Which ideals of a poset have arbitrarily large (finite) antichains?

In this talk, we present results concerning these two problems. In particular, we will talk about the induced subgraph relation on simple graphs and the minor relation on matroids.