

VRG: Arithmetic combinatorics over finite fields (Petridis)

The instructor and participants will present analogs of standard results in combinatorial geometry, combinatorial number theory, and geometric measure theory in the context of finite fields. The topics have been chosen to introduce the wide range of methods that can be applied to such problems. Almost everything will be done from scratch and so the course has no prerequisites. We will learn the state-of-the-art for many central questions in the area and begin investigating how improvements may be made.