



The rising STAR of Texas

Discrete Mathematics Seminar

Time: Friday, Oct 30, 2020, 9:00-10:00 AM (Central Time)
Title: On quantitative characterization of finite nonabelian simple groups
Speaker: Dr. Jinbao Li, Department of Mathematics, Chongqing University of Arts and Sciences, China
Zoom Link: <https://txstate.zoom.us/j/95566530916?pwd=OGI4NINJN1U0UUUROU9ML1MxUjdmZz09>
ID: 955 6653 0916
Passcode: **753321**

Abstract:

In the past forty years, several kinds of quantitative characterizations of finite groups especially finite simple groups have been investigated by many mathematicians, such as quantitative characterizations by group order and element orders, by element orders alone, by the set of sizes of conjugacy classes, by dimensions of irreducible characters, by the set of orders of maximal Abelian subgroups.

In this talk, we will introduce some weaker quantitative characterizations of finite nonabelian simple groups by their orders together with some special quantitative properties such as the largest element orders and the largest conjugacy class sizes.

In addition, we will also introduce Thompson's problem on same order type and solvability of finite groups.