Department of Mathematics
University of Notre Dame

LOGIC SEMINAR

Guest Speaker: Ulla Karhumäki
University of Helsinki

Date: Tuesday, April 23, 2024
Time: 2:00 PM
Location: 125 Hayes-Healy Bldg
Zoom URL: NA

Lecture Title:
Small supersimple pseudofinite groups

Abstract

A simple group is pseudofinite if and only if it is isomorphic to a (twisted) Chevalley group over a pseudofinite field. This celebrated result mostly follows from the work of Wilson in 1995 and heavily relies on the classification of finite simple groups ($CFSG$). It easily follows that any simple pseudofinite group G has a supersimple finite SU-rank theory. In particular, if $SU(G) = 3$ then G is isomorphic to $PSL_2(F)$ for some pseudofinite field F. In this talk we will see that the classification $G \cong PSL_2(F)$ above does not require $CFSG$. This is joint work with Frank Wagner.

Ulla Karhumäki - University of Helsinki