

## Algebra, Combinatorics and Number Theory Seminar

**Date.** Monday, September 27, 2021 - 5pm (UTC+1) <sup>1</sup>

**Speaker.** Martino Garonzi - Universidade de Brasília - UnB - DF, Brasil

**Title.** Kirkman triple systems whose orders fill a congruence class

**Abstract.**

A Steiner triple system  $\text{STS}(v)$  is a set of triples of  $\{1, 2, \dots, v\}$  such that every pair of points belongs to exactly one of these triples. A Kirkman triple system  $\text{KTS}(v)$  is a  $\text{STS}(v)$  whose triples can be partitioned into parallel classes, each of which is a partition of the point set. A  $\text{KTS}(v)$  is called 3-pyramidal if it admits a group of automorphisms that fixes 3 points and acts regularly on the other points. I will present recent results we obtained about 3-pyramidal Kirkman triple systems. This is joint work with S. Bonvicini, M. Buratti, G. Rinaldi and T. Traetta.

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<sup>1</sup><https://videoconf-colibri.zoom.us/j/85917155304?pwd=ZU1YUGJRcTJzTOVjSHF5N2hNdTJQZz09>