

## Algebra, Combinatorics and Number Theory Seminar

**Date.** Wednesday, November 13 - 4pm (Porto), 1pm (Brasília), 5pm (Salerno), <sup>1</sup>

**Speaker.** Guilherme Rocha Ortega - Universidade de Brasília (UnB)

**Title.** On Some Finiteness Conditions of the Weak Commutativity Group

**Abstract.**

Let  $G$  be a group and consider the group  $\chi(G)$  obtained from the free product  $G * G$  by forcing each element  $g$  in the first free factor to commute with the copy of  $g$  in the second free factor. In the last 44 years, this group has been a formidable tool for obtaining finiteness conditions in Group Theory. In this talk, we want to present some important results related to the group  $\chi(G)$ . Moreover, we want to establish some properties of the exponent of  $\chi(G)$  when  $G$  has finite exponent.

---

<sup>1</sup><https://videoconf-colibri.zoom.us/j/7820604023>