

# Mauricio Duarte (UNAB): Class dynamics on a ring

## **Abstract:**

Exclusion processes in one dimension have attracted considerable attention across multiple research communities. While our understanding of TASEP is well-developed, systems with multiple interacting species remain less understood. This talk presents a model featuring different particle species with hierarchical dynamics on a ring lattice. Although such processes have been extensively studied in both physics and mathematics literature, with their stationary distributions well characterized, we propose a fresh perspective: analyzing the stationary distribution through elementary linear algebra techniques combined with optimization algorithms.