

# Seminar on Semigroups, Automata and Languages

## Formations of inverse semigroups

Isabel J. Nobre

NOVA School of Science and Technology

**Abstract:** This presentation will focus on extending the theory of formations of groups to inverse semigroups. The definitions and properties established for finite groups will serve as a starting point, from which we will define formations of finite inverse semigroups. Furthermore, we will examine wider classes, including *i*-formations (where *i* represents idempotent-separating) and some classes named *f*-formations (where *f* stands for fundamental). The relation between the nature of a class of groups and that of certain classes of inverse semigroups with associated groups in the first will be discussed. We will also consider the product of formations and present an *f*-formation product similar to Gaschütz's product for groups.

**Date:** Friday, 15 December 2023, 14:30

**Place:** Online Zoom meeting