

TS12: Thematic Session: Geometric and combinatorial (inverse) semigroup theory 1

Monday 30 June, 11:00–12:30 • Room 110

Carl-Fredrik Nyberg Brodda (Korea Institute for Advanced Study)

Time: 11:00–12:30

An introduction to combinatorial inverse semigroup theory

Combinatorial semigroup theory is an old subject, but its incarnation as applied to inverse semigroups is relatively new. This session will be a gentle introduction to the subject, where I will first go over the main historical developments and the main technical tools behind the subject, including free inverse monoids, Munn trees, presentations of inverse monoids, Stephen's procedure, and many more things. I will also contrast the subject with results from the more matured areas of combinatorial semigroup and group theory, and finish by presenting an overview of some of the recent surprising results that have set the stage for a new chapter in the area.
