Stability of return groups

France Gheeraert , Herman Goulet-Ouellet[1], Julien Leroy[2], and Pierre Stas*[3]

[1]Czech Technical University in Prague – République tchèque
[2]Universite de Liege – Belgique
[3]Université de Liège – Belgique

Résumé

Return words are a classical tool for studying shift spaces with low factor complexity. In recent years, their projection inside groups have attracted some attention, for instance in the context of dendric shift spaces, of generation of pseudorandom numbers (through the welldoc property), and of profinite invariants of shift spaces. Aiming at unifying disparate works, we introduce a notion of stability for subgroups generated by return words. Within this framework, we revisit several existing results and generalize some of them. We also study general aspects of stability, such as decidability or closure under certain operations. The aim of this talk is to present the main definitions, tools and results used to achieve this.

*Intervenant