Just Infinite Profinite Branch Groups

12 December 2009 at Royal Holloway, University of London

This one-day meeting will introduce newcomers to self-similar groups, and then move on to recent results and open problems from a profinite perspective.

12.00 – 13.00 **Branch groups: theory and practice** (John Wilson)

Abstract. Some of the examples that led to the definition of branch groups will be discussed, and then a purely group-theoretic characterization of branch groups (both abstract and profinite) will be described.

14.00 – 15.00 **Some branch group constructions** (Dan Segal)

Abstract. A technique for using rooted-tree automorphisms to construct finitely generated groups with various more or less interesting properties will be explained.

15.30 – 16.30 **Profinite groups generated by automata** (Laurent Bartholdi)

Abstract. We discuss: automata; the discrete groups they generate; their closure and completion, two interesting profinite groups, the difference between them; and, finally, some 'arithmetic' and 'non-arithmetic' examples of free groups.

16.45 – 17.00 **Open Problems** (Bartholdi, Segal, Wilson et al.)

- *Location:* Royal Holloway College, McCrea Building, Room 219.
- *Date:* Saturday, 12 December 2009
- *Local Organisers:* Yiftach Barnea and Benjamin Klopsch
- *Registration:* All are welcome to attend the meeting. Please send a short email to `profinitegroups@googlemail.com` if you intend to come, so that we can make adequate provisions for lunch and tea.

Further information on this and subsequent meetings at

`http://www.ma.rhul.ac.uk/profinite_groups/meetings.html`