

# “Group Theory International” Online Seminar

**Nicholas Touikan**

*(Stevens Institute of Technology)*

*“On some algorithmic problems in Nilpotent groups”*

**Thursday, October 16, noon (New York Time)**

**Abstract:**

I will present two algorithmic problems: effective separation of torsion by congruence subgroups and the mixed Whitehead problem. The solvability of these problems is one of the main steps needed to apply the method, developed by F. Dahmani and myself, to “lift” solutions of the isomorphism problem from a class of parabolic groups to the corresponding class of relatively hyperbolic groups.

I will sketch our solution for Nilpotent groups, and then discuss why we haven't been able to generalize this result any further.

Next presentation: **Oct 30, TBA**