NICKOLAS TOUIKAN, McGill University, 805 Sherbrooke Street West, Montreal, QC, H3A 2K6
The Solvability Problem for Quadratic equations over free groups is NP-complete

We prove that the problems of deciding whether a quadratic equation over a free group has a solution is NP-complete.

This is joint work with O. Kharlampovich, I. G. Lysenok and A. G. Myasnikov.