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Delaram Kahrobaei* (dkahrobaei@gc.cuny.edu), 365 Fifth Ave, New York, NY 10016, and
Maggie Habeeb and **Vladimir Shpilrain**. *A Secret Sharing Scheme Based on Group
Presentations and the Word Problem.*

A (t, n) -threshold secret sharing scheme is a method to distribute a secret among n participants in such a way that any t participants can recover the secret, but no $t - 1$ participants can. In this talk, we propose two secret sharing schemes using non-abelian groups. One scheme is the special case where all the participants must get together to recover the secret. The other one is a (t, n) -threshold scheme that is a combination of Shamir's scheme and the group-theoretic scheme proposed in this talk. This is a joint work with M.Habeeb and V.Shpilrain. (Received September 24, 2012)