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Alexei Miasnikov* (alexei@rio.sci.ccny.cuny.edu). *Algebraic extensions of free groups.*
Preliminary report.

Algebraic extensions of free groups mimic corresponding notions from field theory. Let H be a subgroup of a free group F . We say that F is a free extension (or a purely transcendental extension) of H if H is a free factor of F . On the other hand, F is termed an algebraic extension of H if H is not contained in a proper free factor of F . It turns out that one can develop a basic theory of algebraic extensions of free groups similar to algebraic extensions of fields. I am going to discuss algebraic closures of subgroups of free groups and their applications. (Received October 02, 2000)