Meeting: 998, Houston, Texas, SS 17A, Special Session on Coding Theory and Cryptography

998-11-400 **Oliver A Schirokauer*** (oliver.schirokauer@oberlin.edu), Department of Mathematics, Oberlin College, Oberlin, OH 44074. *Computing discrete logarithms in finite fields.* Preliminary report.

I will discuss some recent implementations of the number field sieve and function field sieve algorithms for computing discrete logarithms in a finite field F. I will pay particular attention to the methods used to overcome the obstruction caused by the need to construct *l*th powers in a global field for a prime divisor *l* of $|F^*|$.

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