

1009-15-198

**Ph Feinsilver\*** (pfeinsil@math.siu.edu), Department of Mathematics, Southern Illinois University, Carbondale, IL 62901-4408, and **J P McSorley** (jmcsorley@math.siu.edu), Department of Mathematics, Southern Illinois University, Carbondale, IL 62901-4408. *Second quantization and recurrences.*

We discuss in detail the second quantization of two-step recurrences and derive an identity involving cyclic binomials and Chebyshev polynomials. A combinatorial setting through matchings polynomials is given as motivation. The general case of higher-order recurrences will be indicated. (Received August 16, 2005)