1023-94-192 Kristen Meyer* (kristi.meyer@wlc.edu), 8800 W. Bluemound Rd., Milwaukee, WI 53226. Eliminating Eve's Eavesdropping (or How to Stop a Snoop).

One of the most common problems in cryptography deals with ensuring the integrity of a message. Message authentication codes, or MACs, are commonly used to deal with this problem. This talk will describe one particular MAC (called QMAC), which relies on the nonassociativity of extremely large quasigroups for its security. I will discuss a method for creating such quasigroups involving linear feedback shift registers. (Received August 22, 2006)