1145-06-1936 **Ting Gu*** (gut@etown.edu). *Correlation immune functions with respect to the q-transform.*

Correlation immunity is an important property of Boolean functions that are used in stream ciphers. The Walsh transform has traditionally been used to study properties of Boolean functions, especially correlation immunity. The q-transform is a generalization of the Walsh transform that was introduced by Klapper in 2014, and a recent paper by Gu et al. has introduced two notions of q-correlation immunity. This talk will discuss the number of q-correlation immune functions with minimal Hamming weight in n variables. (Received September 24, 2018)