1079-14-235 **Artur Elezi*** (aelezi@american.edu) and **Tony Shaska** (shaska@oakland.edu). *Quantum Codes from superelliptic curves.*

Let $\mathcal{X}$ be an algebraic curve of genus $g \geq 2$ defined over a finite field of characteristic $p > 0$. Under certain conditions, an algebraic geometry code C is constructed from $\mathcal{X}$. If the code C is self-orthogonal under the symplectic product, then a related quantum code Q is constructed. In this talk we detail (a) the construction of such codes when $\mathcal{X}$ has automorphisms, and (b) the relations between the automorphism groups of $\mathcal{X}$, C and Q. (Received January 15, 2012)