1077-14-175   **T. Shaska*** (`shaska@oakland.edu`), **L. Beshaj** and **V. Hoxha**. *Interesting families of algebraic curves.*

Algebraic curves covering elliptic curves have been studied extensively in algebraic geometry or number theory. There is some interest lately on such families of curves from the cryptography viewpoint in constructing attacks in elliptic curve cryptography as well as the number theory viewpoint of constructing curves with many rational points, etc. We will discuss some families of such curves for genus $g \leq 5$, their automorphisms, and possible applications. Invariants of superelliptic curves which are covers of elliptic curves are introduced and their half-integer rational theta-nulls are discussed. (Received August 07, 2011)