Tony Shaska* (shaska@oakland.edu). *Minimal equations of curves over their minimal field of definition.*

For a given genus $g \geq 2$ the field of moduli of algebraic curves is not necessary a field of definition. Work of Weil, Shimura and others give conditions when this is true, however an algorithmic approach to determine the field of moduli and the minimal field of definition for a given algebraic curve $C$ is still not known. If such minimal field of definition $F$ is known for a given $C$, then an interesting question becomes if there is a "minimal model" of $C$ defined over $F$. We will discuss such questions and give some results for some special families of curves. (Received January 28, 2014)