1163-14-1250 **Amanda Knecht*** (amanda.knecht@villanova.edu), 800 Lancaster Ave, St Augustine Ctr Rm 305, Villanova, PA 19085. *Degree of Unirationality of Cubic Surfaces over Finite Fields.*

A cubic surface is the zero set of a degree three homogeneous polynomial in four variables. For example, the Fermat cubic surface is defined by the vanishing of the equation $x^3 + y^3 + z^3 = w^3$. It has been known for more than 100 years that for any smooth cubic surface X there is a one-to-one map between projective three space and X when the surface is defined over an algebraically closed field like the complex numbers. This is not true over non-closed fields like the real numbers. In 2002 Kollár proved that over any field there is a finite-to-one map from projective three space to X as long as there is at least one solution to the defining polynomial equation over that field. In this talk we will address what is known about the degree of that finite-to-one map for surfaces defined over finite fields. We are still working on finding the lowest degree. (Received September 15, 2020)