1116-11-2066   **Jennifer Berg*** (`jberg@math.utexas.edu`). *Integral Brauer-Manin obstruction for generalized affine Châtelet surfaces.* Preliminary report.

In recent years, there has been a growing interest in obstructions to the existence of integral points on affine varieties. For example, given an extension K/k of number fields of degree n, one might ask when can values of a polynomial P(t) over k be represented by norms of elements of K? In 2012, Colliot-Thélène and Harari asked for the integral Hasse principle and strong approximation for the variety defined by $x^2 + ay^2 = P(t)$, where P(t) is separable of degree at least 3. They observed that known techniques did not allow for progress in this direction at the time. In this talk, we consider a particular family of varieties of this form, for which we construct explicit representatives of the classes in the Brauer group of X that can be used to compute the integral Brauer-Manin obstruction. (Received September 21, 2015)