1042-14-105 Jessica Sidman* (jsidman@mtholyoke.edu), Department of Mathematics and Statistics, Mount Holyoke College, South Hadley, MA 01002, and Peter Vermeire. Syzygies of the secant varieties of curves.

In the 1980's, work of Green suggested that results on quadric generation of the ideal of a curve of high degree could be seen as a piece of a picture involving all of the higher syzygy modules of the curve. Many results for curves have analogues for varieties of higher dimension. However, the picture remains much less well understood in dimension greater than one.

I will discuss some results on the syzygies of the secant variety of a high degree curve. We will see that a conjectural picture emerges for the syzygies of higher secant varieties which generalizes what we know to be true for curves. (Received August 13, 2008)