1125-VA-2207 **Ryan Coopergard*** (coope786@umn.edu) and **Marju Purin** (purin@stolaf.edu). Truncated Path Algebras and Betti Numbers with Polynomial Growth. Preliminary report.

In this talk, we will introduce a class of truncated path algebras in which the Betti numbers of a simple module satisfy a polynomial of arbitrarily large degree. We will give examples of such algebras where the i^{th} Betti number of a simple module S is $\beta_i(S) = i^k$ for $2 \le k \le 4$ and provide a method for constructing truncated path algebras where $\beta_i(S)$ is a polynomial of degree four or less with nonnegative integer coefficients. In particular, we prove that algebras in this class can produce Betti numbers corresponding to any polynomial in a certain family. (Received September 19, 2016)