

1125-VU-2563 **Marian Anton** and **Landon Renzullo*** (landonrenzullo@gmail.com), Department of
Mathematical Sciences, CCSU, New Britain, CT 06050. *On an Algorithm in Data
Homology*. Preliminary report.

The study of data clouds using distance matrices and the homology of their associated Rips complexes may reveal relevant information about various projections of these complexes in lower dimensions. In this context, we present work in progress on an algorithm based on graph theory dealing efficiently with these lower dimensional projections that may reveal new topological insights into highly interconnected networks. (Received September 20, 2016)