

1035-05-1307 **Wasin So*** (so@math.sjsu.edu), Department of Mathematics, San Jose State University, San Jose, CA 95192. *Graph energy change due to single edge deletion*. Preliminary report.

Motivated from chemistry, the energy of a graph is defined as sum of the absolute value of the eigenvalues of its adjacency matrix. It is natural to consider how the graph energy changes when edge is deleted. Examples show that the graph energy may increase, decrease, or even remain unchanged. However the last case is very rare. In this talk, we discuss the construction of an infinite family of graphs, each of them possesses edge whose deletion will not change the graph energy. (Received September 19, 2007)