## Supplementary Material

I. FIGURES

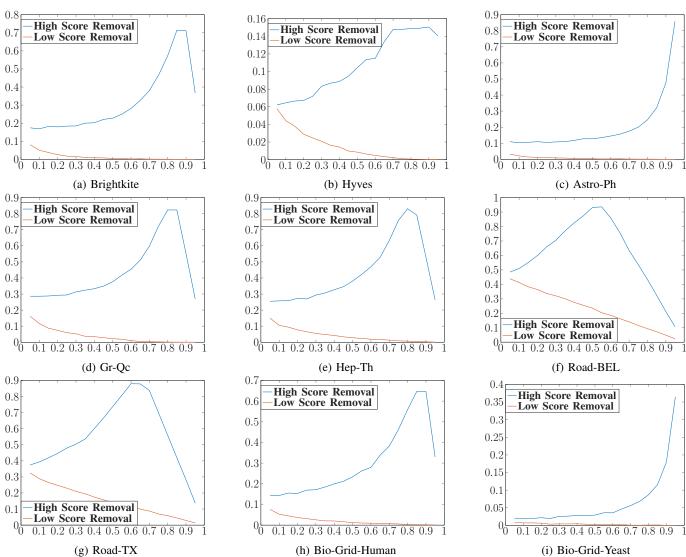


Figure 1: Second Spectral Moment  $m_2$  with Sequential Edge Removal. x: fraction of removed edges; y:  $m_2$ . (Note: For large graphs with more than 5 million edges such as Livejournal and Orkut, sequential edge removal is too time-consuming to compute, as sequential edge removal requires update on the order each time we remove only the top-1 edge.)