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Week 1 (13th Feb-17th Feb,2017):

- Complexity in computing centrality measures of networks. consider a network comprising of n nodes and m edges; Degree centrality(O(m)), closeness and betweenness centralities(O(n^3)), and Laplacian centrality O(nδ^2).
- The computation for robustness in this paper raised concerned that is to say I did not understand how the computation is carried out.
- Seven is a magic number. Each bird maintains interaction among seven other birds irrespective of the distance of separation.

Week 2 (3rd-10th Feb,2017):

a) Leverage centrality:

- The leverage centrality is a centrality measure for brain networks.The motivation behind this measure is that the relative importance of a node is based on how its immediate neighbours rely on it for information. its derived from degree centrality.
- A high degree node is not highly central in leverage if its neighbours are also high degree nodes.
- Leverage centrality does not assume that information flows following shortest path or in a serial manner as compared to other betweenness and closeness centralities.
- However, question about how the centrality is computed that is division by the degree of the node whose centrality is being calculated.

b) Relationship between laplacian energy of a graph and that of its corresponding line graph:
So far still working on this.

c) Read about laplacian centrality for directed networks. The out degree is considered in this case. What would the computations using in degree imply?