Network Science Project 1

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Dataset

- jazz musician network
  - 198 vertices
  - 2,742 edges
- undirected, unweighted network
- data source:
  http://konect.uni-koblenz.de/networks/arenas-jazz

Experimental setup

- questions on the network
  - is it a small world network?
    - 90% effective diameter
    - maximum diameter
  - are there large music groups?
    - degree distribution
  - how many musicians have played together?
    - closed triangles
- calculation using SNAP

Results

- 90% effective diameter: 2.754379
- closed triangles: 17899
- assortative correlation coefficient: 0.020237

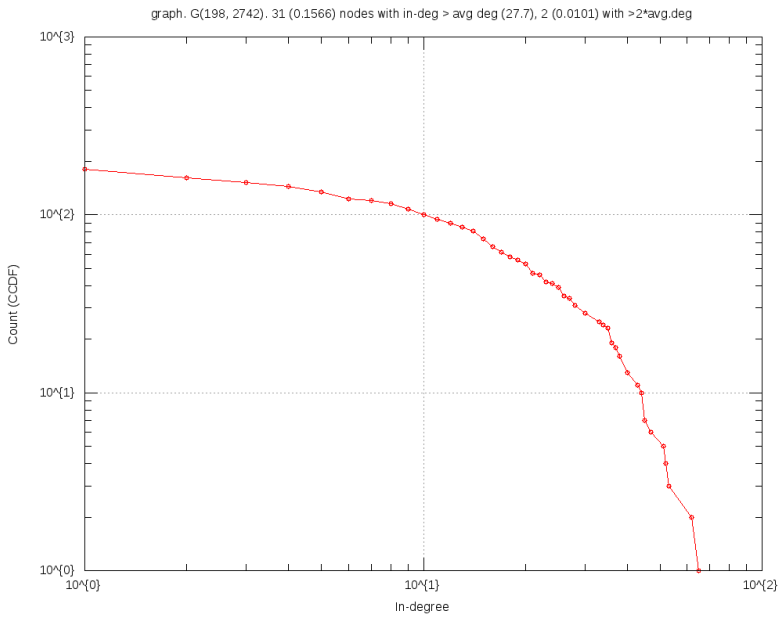

Figure : Cumulative degree distribution

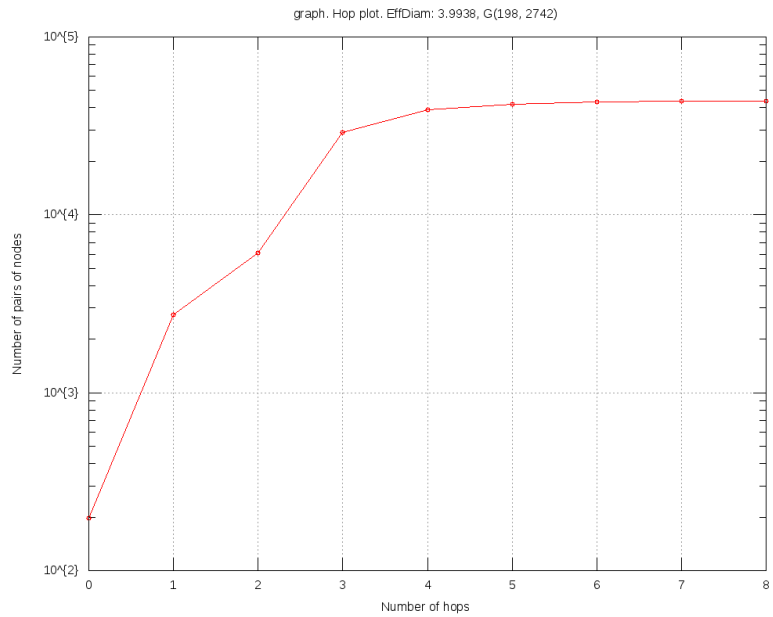

Figure : hop count