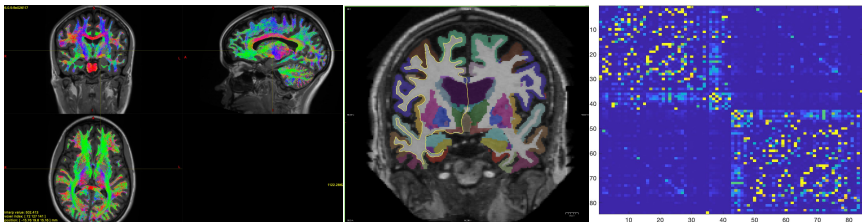# Macro Scale Network Representation of a Human Connectome
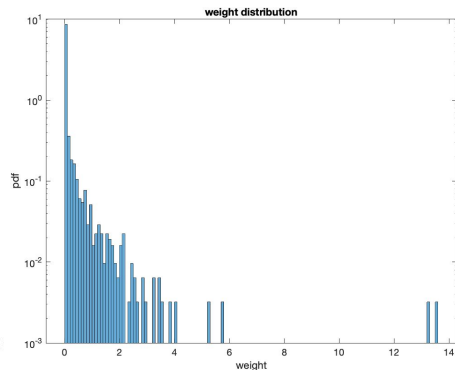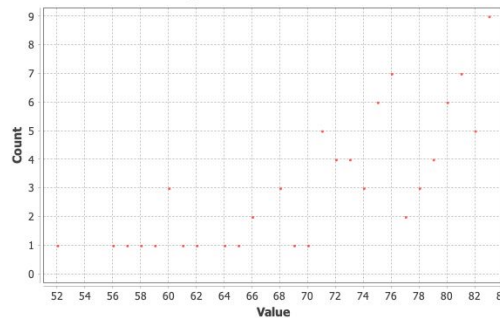
Qiaohan Yang, Interdepartmental Neuroscience

Physics 465 final project

Data and Method

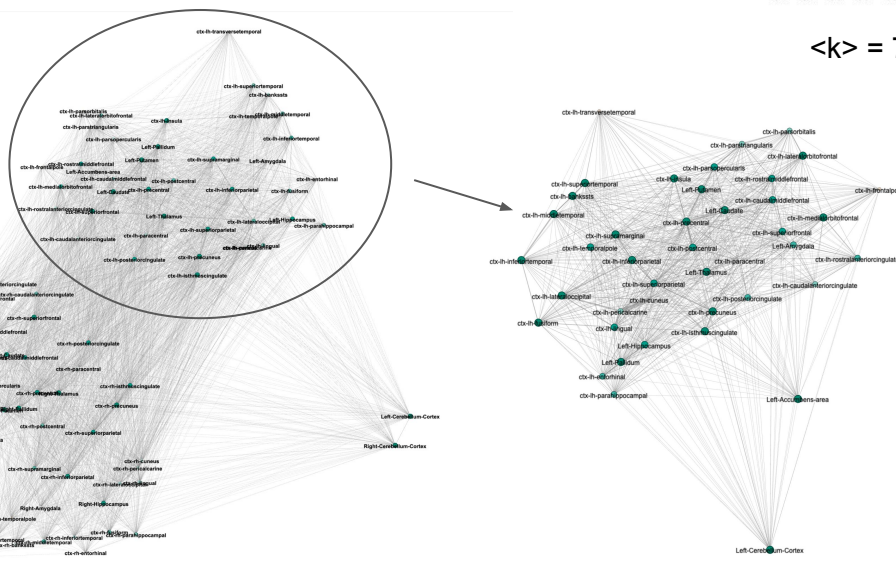Diffusion weighted imaging data from Zelano lab, Dept. of Neurology

Degree Distribution

weight distribution

$\langle k \rangle$ = 74.238, $\langle l \rangle$ = 1.03, $\langle C \rangle$ = 0.915

Result

Observations :

Human brain is very densely connected on a macro scale.

Low degree nodes are primary sensory and motor regions.

Strongest edges are between primary sensory and motor regions that are close anatomically.