Take elec adj mats

Multiply each frame by random matrix of same size

Find eigenvalues of that

Array of eigenvalues

Get a bunch more by multiplying by more random matrices

Find probability distributions of those eigenvalues

Find min/max range of eigenvaluess

Increase number of bins

Maybe 100 bins, about 7 per bin

Probability of each bin (percent of total)

Entropy = -Sigma(Pi\*ln(Pi))

Energy = -Sigma(ln(Pi/(1-Pi)))

At what point over time do the Entropy and Energy plots intersect

Extract the pdb’s with water

Future options:

Orbitals instead of just valence orbitals

Including water to increase size of the matrix

Orbitals with water

More presentation instructions:

New images, explain more of the analysis part now that you know it

New stuff:

Make random matrix by multiplying array of 694 random 0 to 1 (not normally dis) by itself transposed, take sqrt. See matrix with circle

Change the random matrix that you use to be a symmetric normalized matrix. This is calculated by making a random normal n\*n matrix G, then do