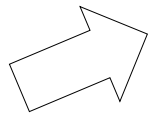
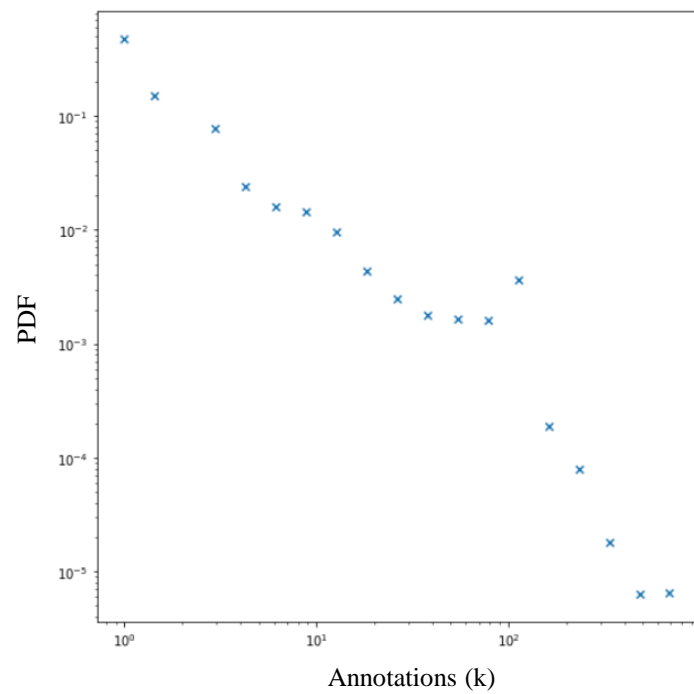
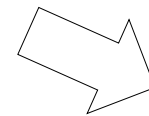
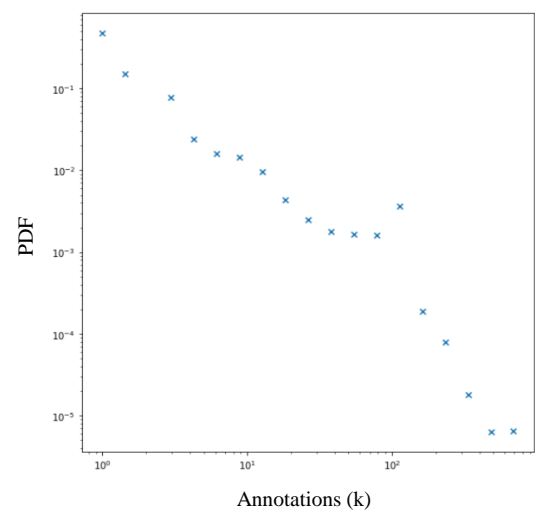


A*Benchmark BindingDB data*

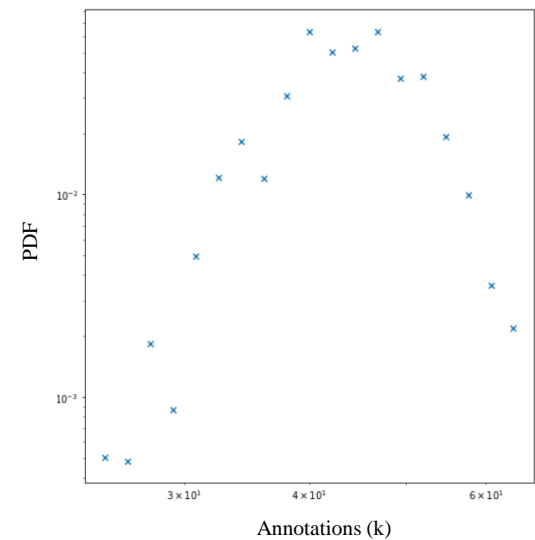
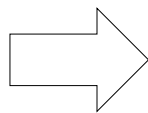
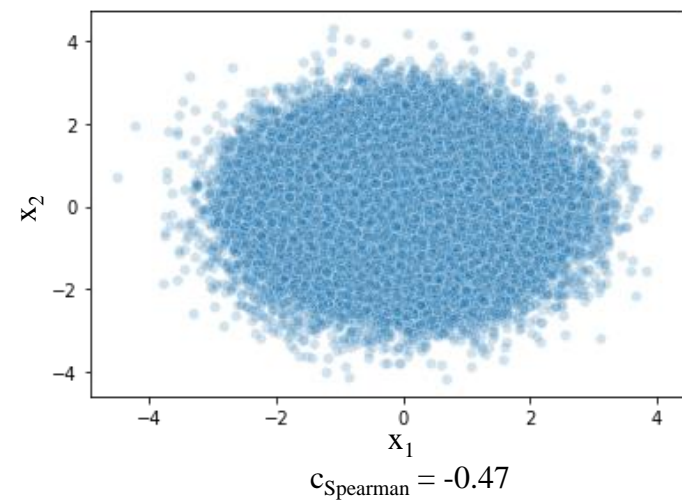
Target degree sequence

 $\{d_1, d_2, \dots, d_N\}$ *Configuration Model*

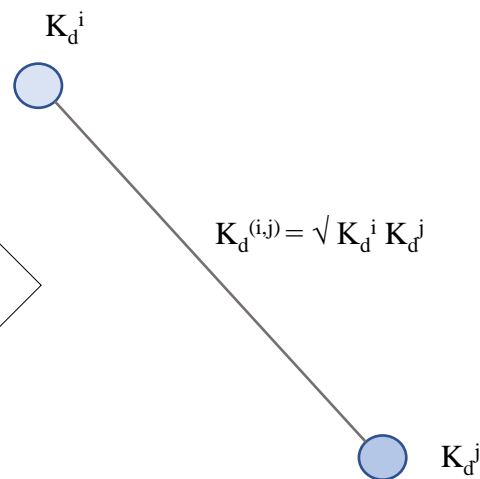
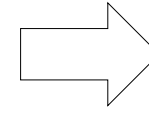
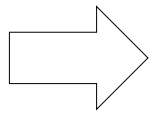
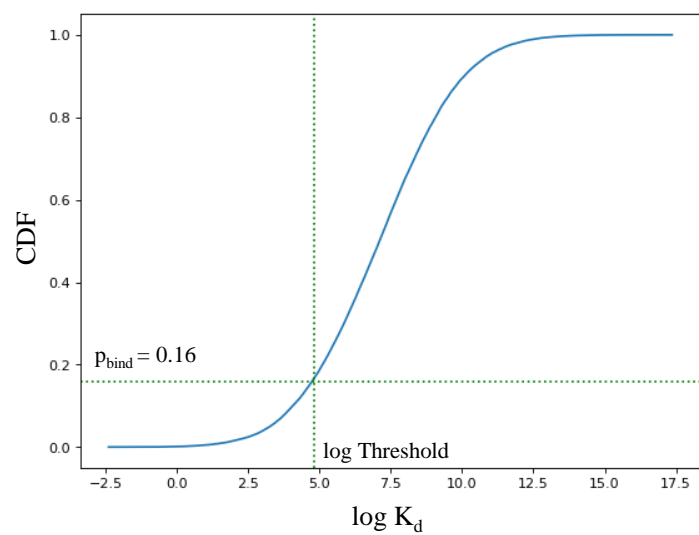
Power-law degree
distribution with
 $N=1,507$
 $\gamma=2.8$
 $k_{\max} = 1,426$

*ER Graph*

Poisson degree
distribution with
 $N=1,507$
 $\langle k \rangle = 47$

**B***Gaussian Copulas* $c_{\text{Spearman}} = 0$ 

$k = \text{degree_seq_CDF}^{-1}(U_1)$
 $\log \langle K_d \rangle = \langle \log K_d \rangle + \text{STD}(\log K_d) * \text{Gaussian_CDF}^{-1}(U_2)$
 $K_d = \exp(\text{Gaussian}(\log \langle K_d \rangle, \text{STD}(k)))$

**C** $K_d^{(i,j)} < \text{Threshold}$

Positive Edge

 $K_d^{(i,j)} \geq \text{Threshold}$

Negative Edge

