

Graph properties:

Nodes	Edges	Global Clustering Coeff.	Average Cluster Coeff.	Assort. Degree	Assort. Nominal
3774767	16518947	0.0671	0.0757	0.1332	-0.0000

Table 1: Summary of the principal graph properties.

Degree properties:

Min	Max	Mean	Median	Variance	Standard Deviation
1	770	7.9063	6.0000	81.4788	9.0266

Table 2: Summary of the principal degree properties.

AIC values:

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete W
Out_Patents	12542623.0718	19322046.0978	16599621.2637	14875550.4324	14635067.7628	12542626.8101	12266814.8693	12487847.8503	-

Table 3: Values of the AIC.

Δ AIC:

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete Weibull
Out_Patents	275808.2025	7055231.2285	4332806.3944	2608735.5631	2368252.8935	275811.9408	0	221032.981	-

Table 4: Values of the Delta AIC.

BIC values:

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete Weibull
Out_Patents	12542635.6241	19322058.6502	16599621.2637	14875562.9848	14635092.8675	12542651.9148	12266839.974	12487872.955	-

Table 5: Values of the BIC.

Δ BIC:

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete Weibull
Out_Patents	275795.6501	7055218.6762	4332781.2897	2608723.0108	2368252.8935	275811.9408	0	221032.981	-

Table 6: Values of the Delta BIC.

Estimated parameters:

Network	q	lambda	gamma_1	gamma_2	K_max	gamma_3	delta	gamma_4	delta_2	gammaNB	pNB	v	p
Out_Patents	0.1265	7.9034	1.4464	1.3417	770	0	0.1352	3.196	119.264	1.4873	0.8317	-	-

Table 7: Values of the estimated parameters.

Initial plots

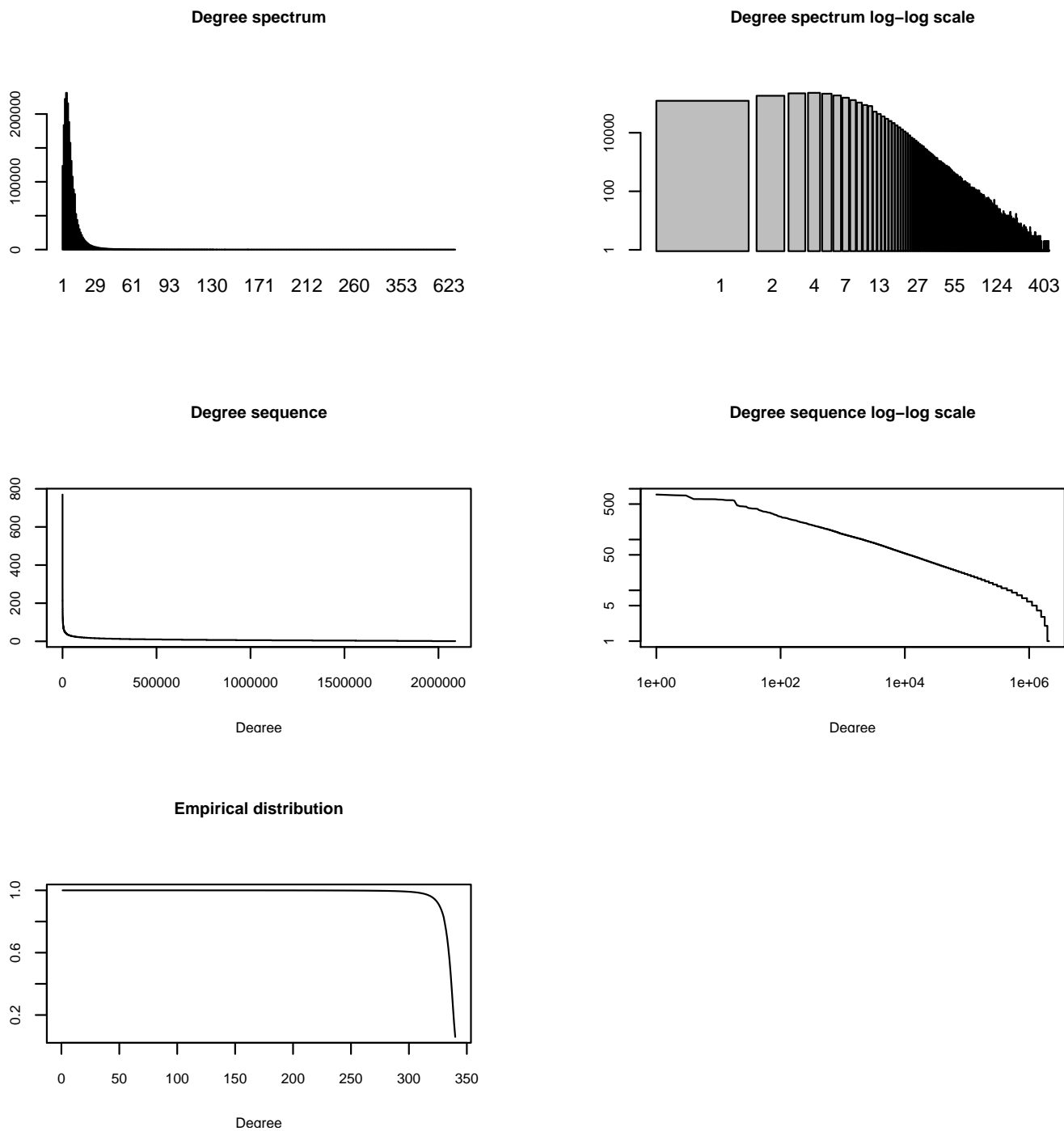


Figure 1: Initial plots.

Fitted model plots:

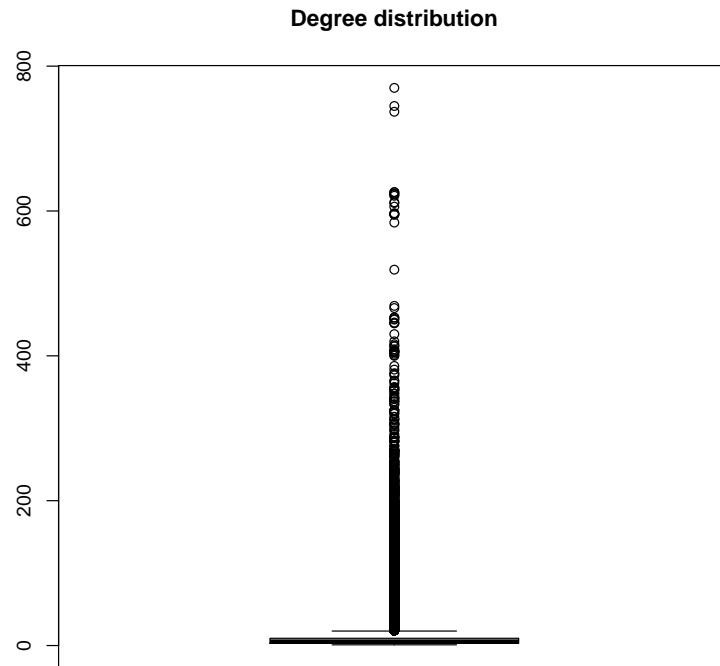


Figure 2: Best Model Fitting the data.

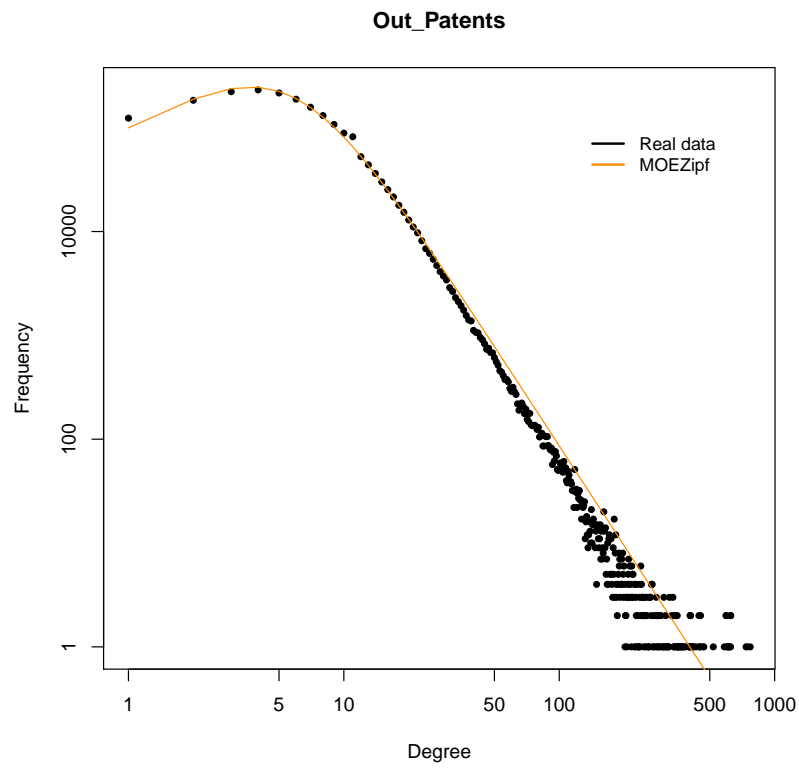


Figure 3: Best Model Fitting the data.

