

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	779	5.0687	3.0000	47.7828	6.9125

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 Weibull
In_Patents	16407252.7645	28349900.2492	17937215.1467	17138585.7	17052510.5332	16054148.6962	16121079.7432	16050112.9181	16021622.7649

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
In_Patents	385629.9996	12328277.4843	1915592.3818	1116962.9351	1030887.7683	32525.9313	99456.9783	28490.1532	0

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
In_Patents	16407265.7614	28349913.2462	17937215.1467	17138598.6969	17052536.527	16054174.69	16121105.7371	16050138.9119	16021648.758

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
In_Patents	385617.0027	12328264.4875	1915566.388	1116949.9382	1030887.7683	32525.9313	99456.9784	28490.1532	0

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
In_Patents	0.1973	5.0358	1.6232	1.5807	779	0.7234	0.1072	2.4795	8.3171	0.2306	0.9008	0.6083	0.5259

Table 7: Values of the estimated parameters.

Initial plots

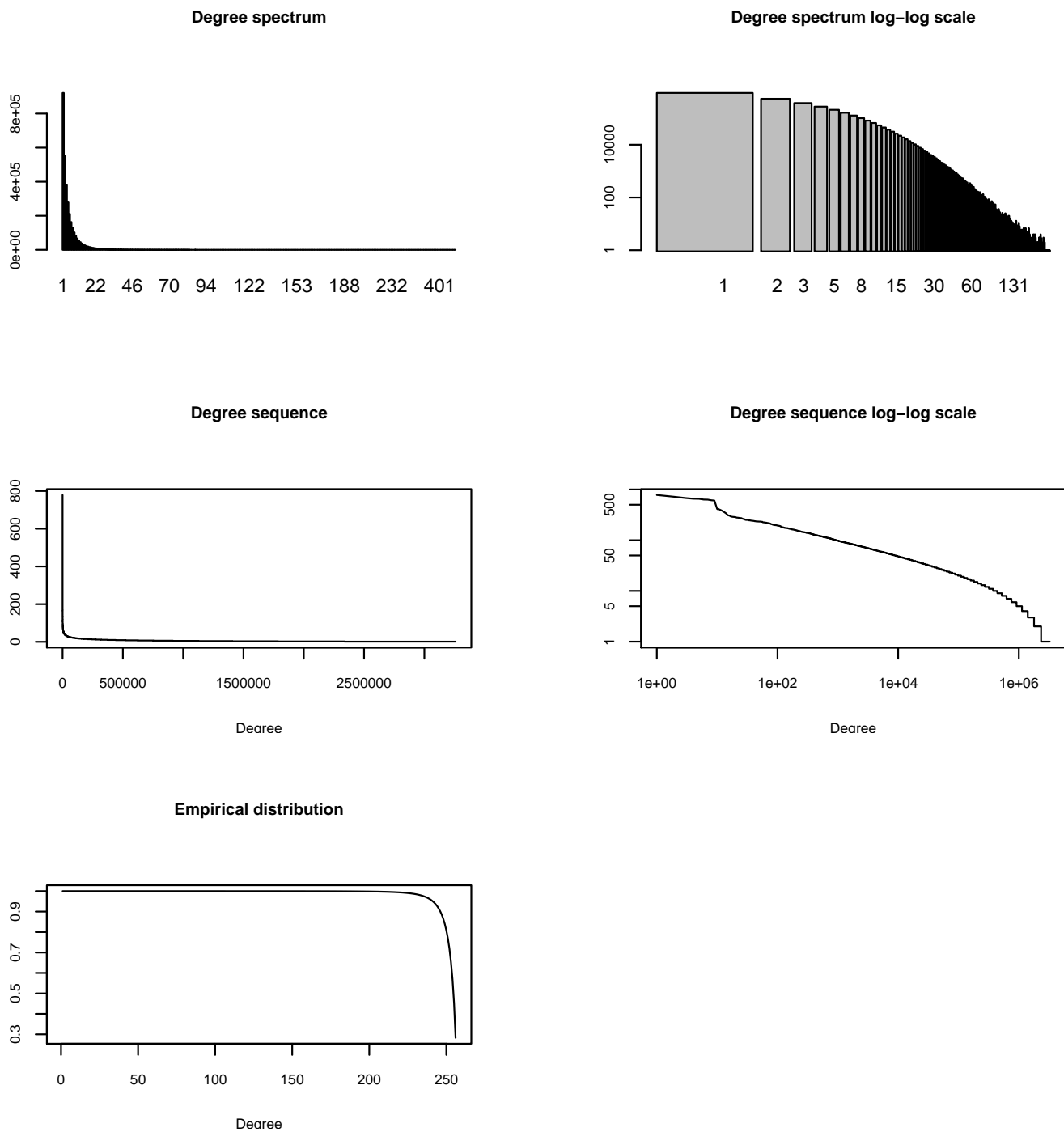


Figure 1: Initial plots.

Fitted model plots:

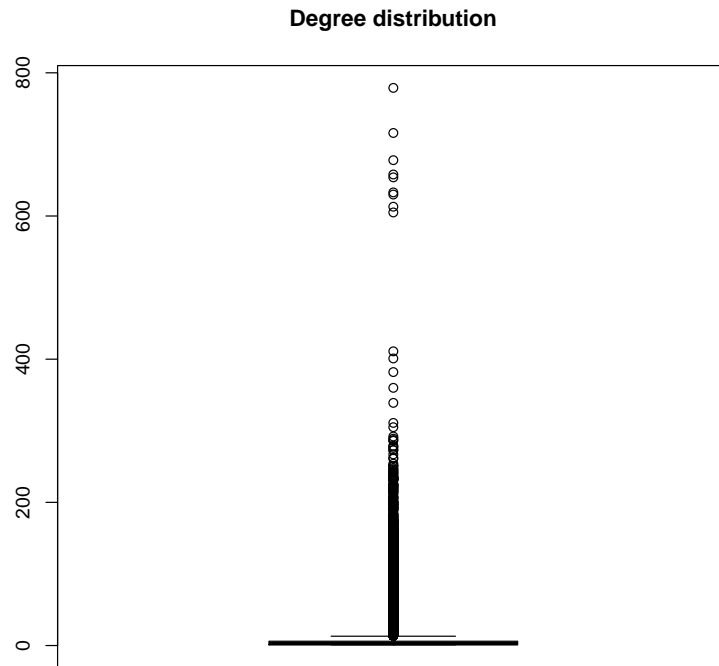


Figure 2: Best Model Fitting the data.

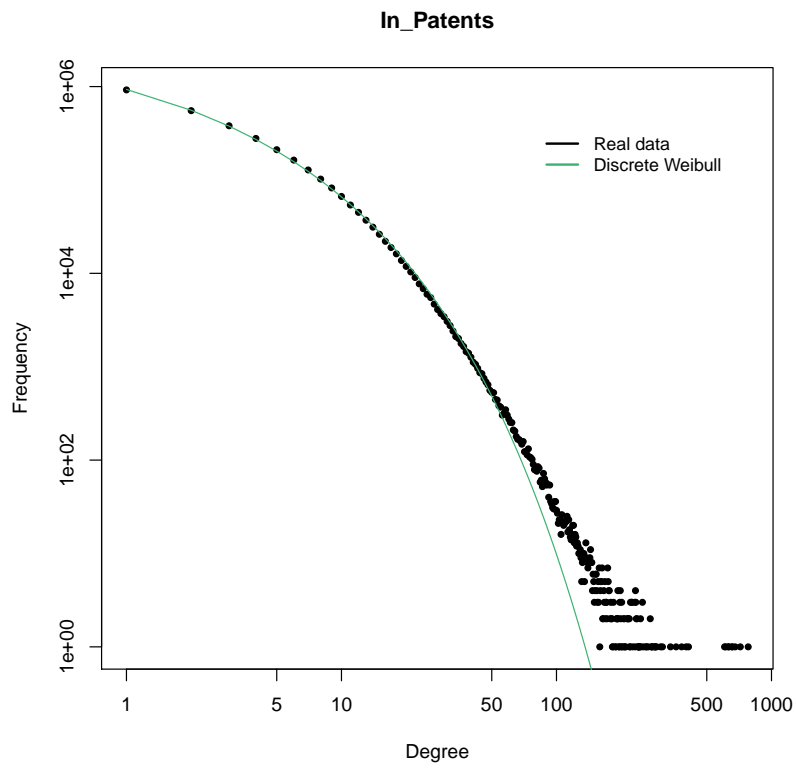


Figure 3: Best Model Fitting the data.

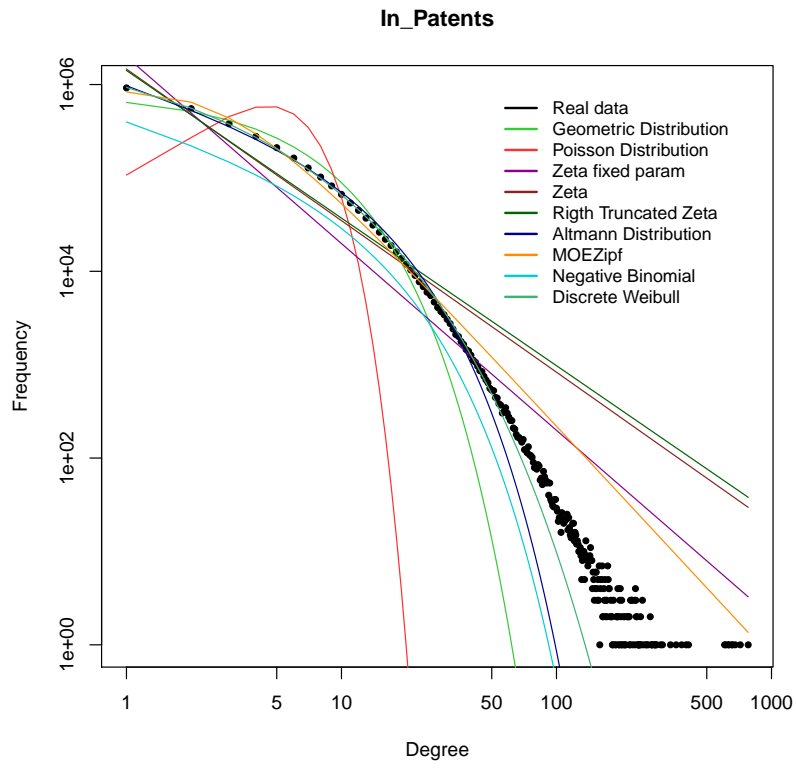


Figure 4: Best Model Fitting the data.