Graph properties:

Nodes	Edges	Global Clustering Coeff.	Average Cluster Coeff.	Assort. Degree	Assort. Nominal
3997962	34681188	0.1253	0.2843	0.0452	-0.0000

Table 1: Summary of the principal graph properties.

Degree properties:

Min	Max	Mean	Median
1	14703	14.9147	5.0000

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
Live_Journal	17058614.8575	81629797.9052	18165227.4533	16331451.5149	16277621.1883	15645727.9728	15672933.9775	17024945.226	1683897

Table 3: Values of the AIC.

ΔAIC:

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete Weibull
Live_Journal	1412886.8847	65984069.9324	2519499.4805	685723.5421	631893.2155	0	27206.0047	1379217.2532	1193249.6372

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 W
Live_Journal	17058627.5168	81629810.5646	18165227.4533	16331464.1742	16277646.507	15645753.2915	15672959.2962	17024970.5447	16839002

Table 5: Values of the BIC.

ΔBIC:

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete Weibull
Live_Journal	1412874.2253	65984057.2731	2519474.1618	685710.8827	631893.2155	0	27206.0047	1379217.2532	1193249.6372

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
Live_Journal	0.067	14.9147	1.4534	1.4263	14703	0.998	0.0162	2.0178	7.0597	0.6217	0.96	0.7446	0.8549

Table 7: Values of the estimated parameters.

Initial plots

Degree spectrum

Degree spectrum log−log scale

Degree sequence

Degree sequence log−log scale

Empirical distribution

Figure 1: Initial plots.

Fitted model plots:

Live_Journal
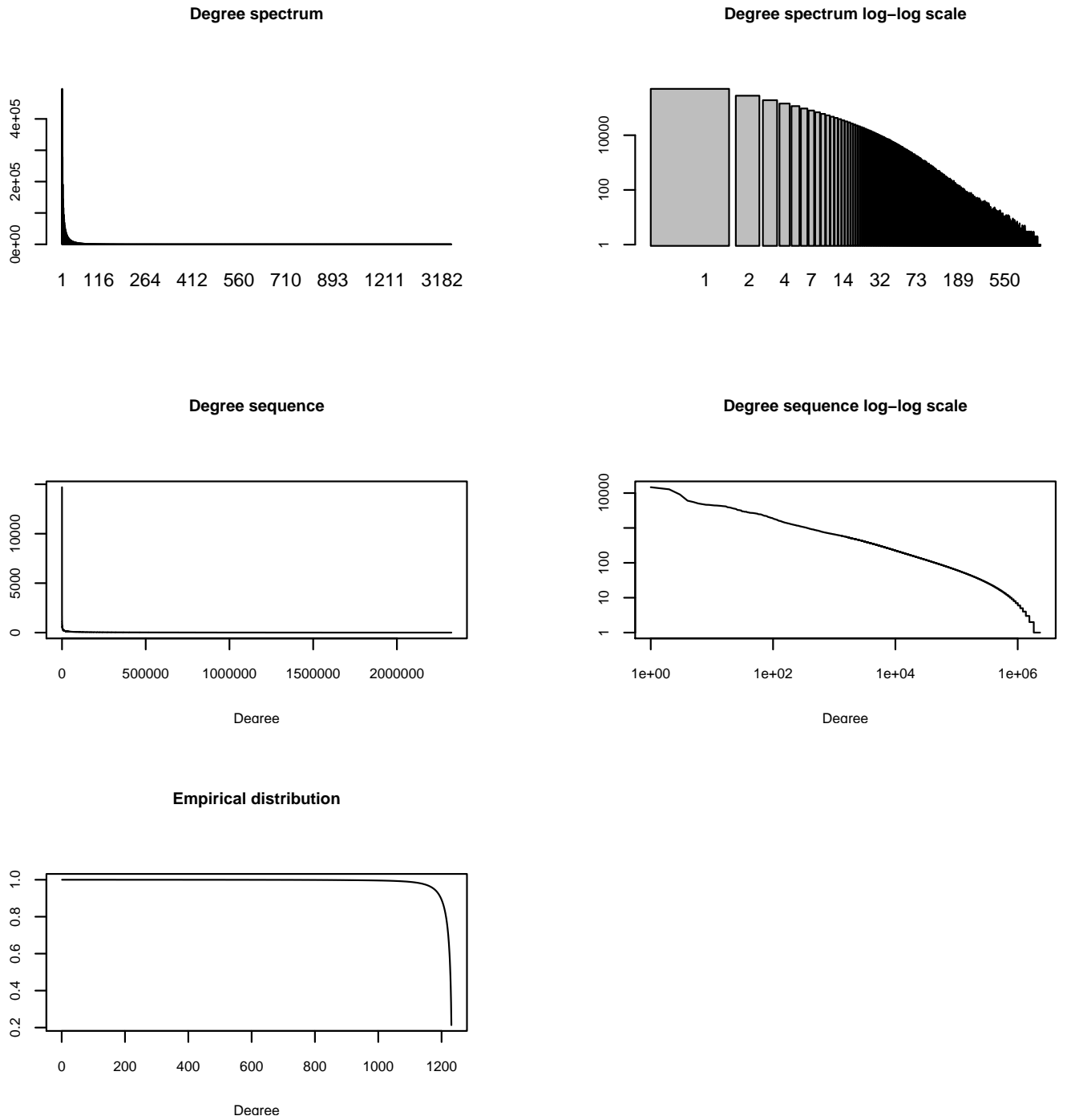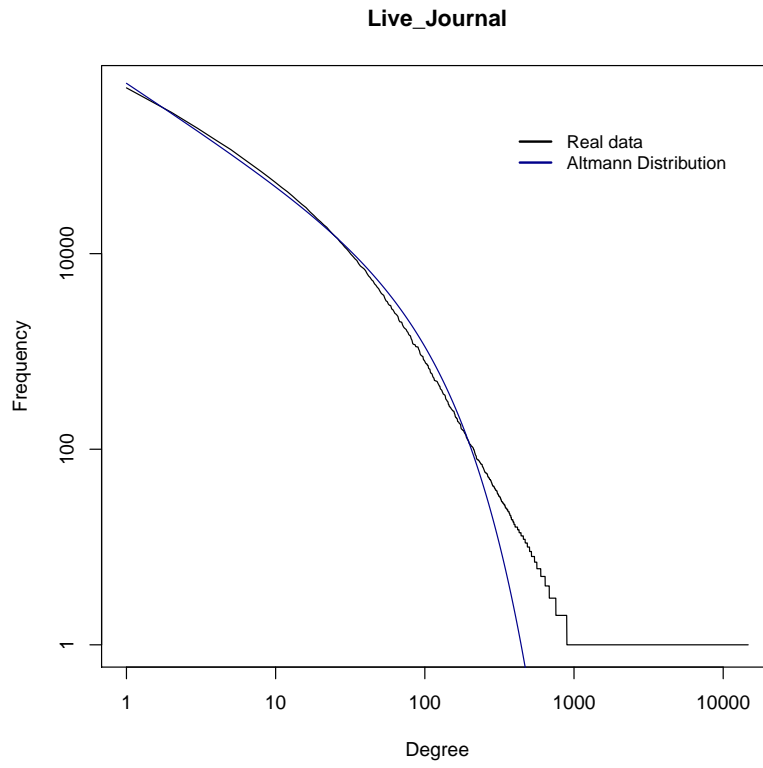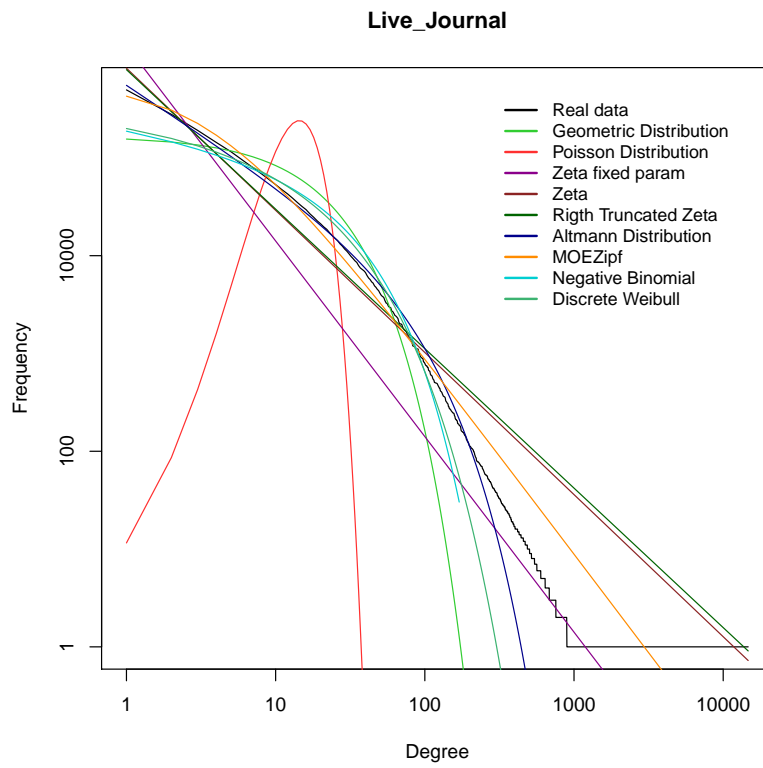

Figure 2: Best Model Fitting the data.

Live_Journal

Figure 3: Best Model Fitting the data.