## Graph properties:

Nodes	Edges	Global Clustering Coeff.	Average Cluster Coeff.	Assort. Degree	Assort. Nominal
317080	1049865	0.3064	0.6324	0.2665	-0.0000

Table 1: Summary of the principal graph properties.

## Degree properties:

Min	Max	Mean	Median
1	306	5.5515	2.0000

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
DBLP_co_authorship	990220.3444	2178388.018	996127.5769	957935.9429	949891.8846	924180.4082	923924.7974	1058677.9862	1056889.1

Table 3: Values of the AIC.

# $\Delta {\rm AIC}:$

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete Weib
DBLP_co_authorship	66295.547	1254463.2206	72202.7795	34011.1455	25967.0872	255.6108	0	134753.1888	132964.3681

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 V
DBLP_co_authorship	990230.4945	2178398.1681	996127.5769	957946.0929	949912.1848	924200.7084	923945.0976	1058698.2864	1056909

Table 5: Values of the BIC.

# $\Delta \mathrm{BIC}$ :

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete Weib
DBLP_co_authorship	66285.3969	1254453.0705	72182.4793	34000.9953	25967.0872	255.6108	0	134753.1888	132964.368

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
DBLP_co_authorship	0.1801	5.5295	1.6485	1.5818	306	1.1175	0.0497	2.2767	4.8613	0.9762	0.8505	0.9369	0.8249

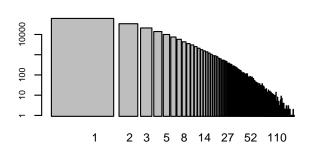
Table 7: Values of the estimated parameters.

# **Initial plots**

#### Degree spectrum

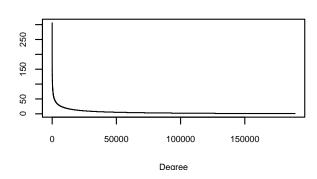
# 20000 20000

#### Degree spectrum log-log scale

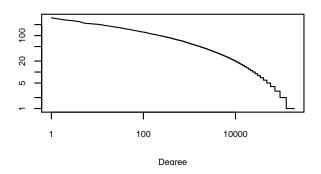


#### Degree sequence

1 16 33 50 67 84 104 127 153 198



#### Degree sequence log-log scale



#### **Empirical distribution**

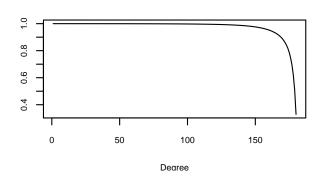


Figure 1: Initial plots.

Fitted model plots:

#### DBLP\_co\_authorship

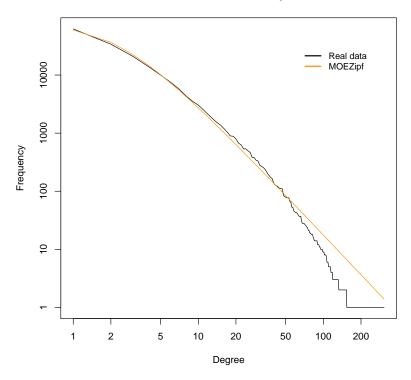


Figure 2: Best Model Fitting the data.

# ${\bf DBLP\_co\_authorship}$

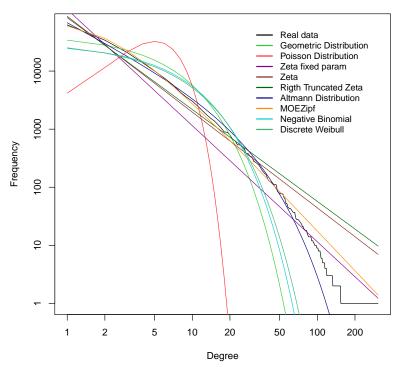


Figure 3: Best Model Fitting the data.