# Graph properties:

Nodes	Edges	Global Clustering Coeff.	Average Cluster Coeff.	Assort. Degree	Assort. Nominal
1134890	2987623	0.0062	0.0808	-0.0369	-0.0001

Table 1: Summary of the principal graph properties.

# Degree properties:

Min	Max	Mean	Median
1	28576	7.9716	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 Weibull
Youtube	2256475.365	13233486.5035	1733258.0171	1695213.8947	1694923.8779	1688294.4382	1674891.7559	2246241.3336	2154183.4598

Table 3: Values of the AIC.

# $\Delta \text{AIC}$ :

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete Weibull
Youtube	581583.6091	11558594.7476	58366.2612	20322.1388	20032.122	13402.6823	0	571349.5777	479291.7039

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
Youtube	2256486.1991	13233497.3376	1733258.0171	1695224.7288	1694945.5461	1688316.1064	1674913.4241	2246263.0018	2154205.128

Table 5: Values of the BIC.

# $\Delta {\rm BIC}:$

Network	Geometric D.	Poisson D.	Zeta non-free p	Zeta	Right-Truncated Zeta	Altamann D.	MOEZipf	Negative Binomial	Discrete Weibull
Youtube	581572.775	11558583.9135	58344.593	20311.3047	20032.122	13402.6823	0	571349.5777	479291.7039

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
Youtube	0.1254	7.9688	1.7297	1.7272	28576	1.64	0.0036	2.089	2.4101	0.5252	0.9382	0.704	0.7363

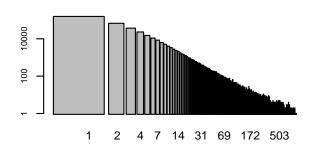
Table 7: Values of the estimated parameters.

# **Initial plots**

#### Degree spectrum

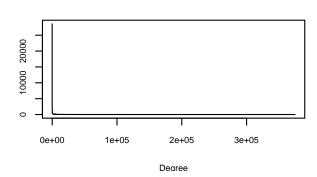
# 150000

#### Degree spectrum log-log scale

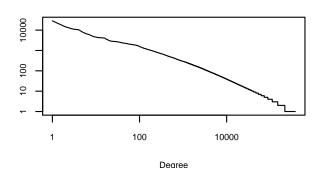


#### Degree sequence

1 71 164 269 376 502 685 997 1993



#### Degree sequence log-log scale



# **Empirical distribution**

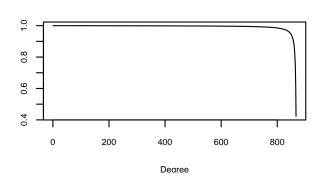


Figure 1: Initial plots.

Fitted model plots:

# Youtube

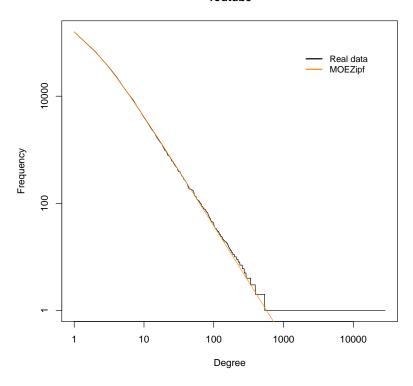


Figure 2: Best Model Fitting the data.

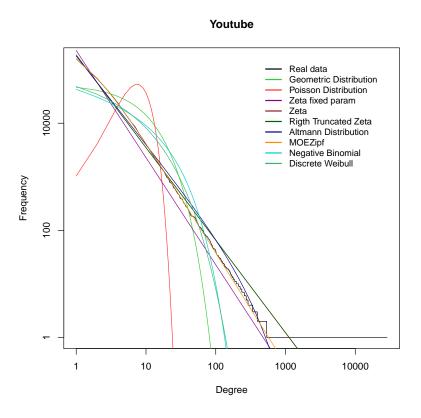


Figure 3: Best Model Fitting the data.