# Graph properties:

Nodes	Edges	Global Clustering Coeff.	Average Cluster Coeff.	Assort. Degree	Assort. Nominal
325729	1497133	0.0877	0.2346	-0.0617	0.0183

Table 1: Summary of the principal graph properties.

# Degree properties:

Min	Max	Mean	Median	Variance	Standard Deviation
1	10721	4.5963	1.0000	1524.8506	39.0493

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 Weib
In_NotreDame	1568438.6574	6089314.4202	1081727.5194	1081681.9027	1081641.9599	-	1081607.5071	_	-

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
In_NotreDame	486831.1503	5007706.9131	120.0123	74.3956	34.4528		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 Weibu
In_NotreDame	1568449.3513	6089325.114	1081727.5194	1081692.5965	1081663.3475	-	1081628.8947	-	-

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 Weibull
In_NotreDame	486820.4566	5007696.2193	98.6247	63.7018	34.4528		0		·

Table 6: Values of the Delta BIC.

# Estimated parameters:

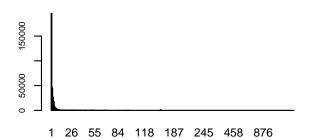
Network	q	lambda	gamma_1	gamma_2	K_max	gamma_3	delta	gamma_4	delta_2	gammaNB	pNB	v	
In_NotreDame	0.2176	4.5476	1.9873	1.9866	10721	-	-	2.0174	1.0657	-	-	-	-

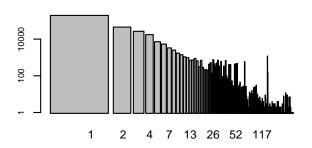
Table 7: Values of the estimated parameters.

# **Initial plots**

#### Degree spectrum

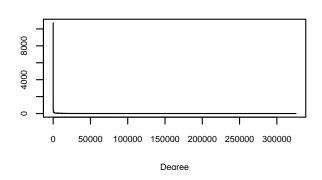
# Degree spectrum log-log scale

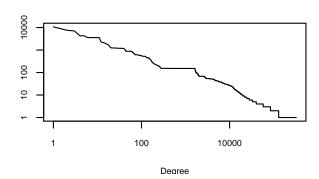




#### Degree sequence

#### Degree sequence log-log scale





#### **Empirical distribution**

# 0. 50 100 150 200 250 300 Degree

Figure 1: Initial plots.

Fitted model plots:

# Degree distribution

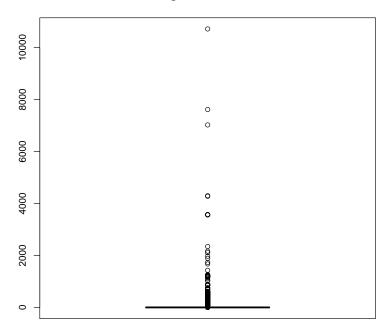


Figure 2: Best Model Fitting the data.

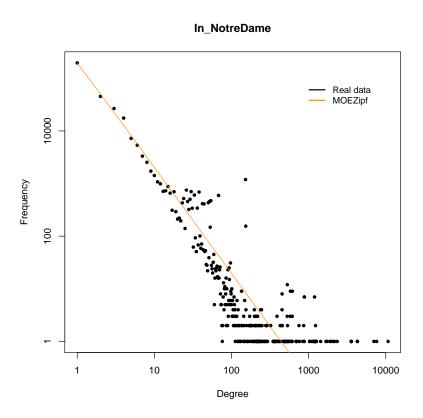


Figure 3: Best Model Fitting the data.

# In\_NotreDame

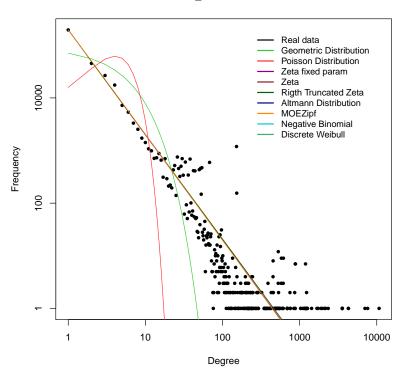


Figure 4: Best Model Fitting the data.