

Supplementary Materials for
*Stochastic Network Modeling
as Generative Social Science*

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Supplementary material for Chapter “Stochastic Network Modeling as Generative Social Science” by Christian E.G. Steglich and Tom A.B. Snijders in “Handbook of Rigorous Theoretical and Empirical Sociology”, edited by Klarita Gërkhani, Nan Dirk de Graaf and Werner Raub (Edward Elgar, 2022)

The basic data set used is in file

https://www.stats.ox.ac.uk/~snijders/AK_F_data.RData

The five following scripts are used:

1. Data set construction:

https://www.stats.ox.ac.uk/~snijders/HoRS_DataSelection.R

2. Estimation of models for friendship only:

https://www.stats.ox.ac.uk/~snijders/HoRS_FriendshipOnly.R

3. Estimation of models for friendship without transitivity:

https://www.stats.ox.ac.uk/~snijders/HoRS_FriendshipWithoutTrans.R

4. Estimation of models for friendship with exogenous dislike:

https://www.stats.ox.ac.uk/~snijders/HoRS_FriendshipDislike.R

5. Community detection using the Louvain algorithm, creation of figures and data for Table 2.:

https://www.stats.ox.ac.uk/~snijders/HoRS_FitCommunities.R