Submitted papers

Students funded by me are indicated by * and other students are indicated by **. Stewart* is tenure-track Assistant Professor, Department of Statistics, Florida State University. Babkin* is Senior Data & Applied Scientist, Microsoft.

Stewart*, Jonathan R. and **Michael Schweinberger.** Pseudo-likelihood-based M-estimation of random graphs with dependent edges and parameter vectors of increasing dimension. Submitted to *The Annals of Statistics.* Under revision.

Eli*, Sean and **Michael Schweinberger.** *Non-asymptotic model selection for models of network data with parameter vectors of increasing dimension.* Submitted to *Journal of Statistical Planning and Inference.*

Jin, Ick Hoon, Jeon, Minjeong, **Schweinberger, Michael**, Yun, Jonghyun, and Lizhen Lin. Hierarchical network item response modeling for discovering differences between innovation and regular school systems in Korea. Submitted to *Journal of the Royal Statistical Society, Series C (Applied Statistics).* Revised and resubmitted.

Accepted papers

Students funded by me are indicated by * and other students are indicated by **. Stewart* is tenure-track Assistant Professor, Department of Statistics, Florida State University. Babkin* is Senior Data & Applied Scientist, Microsoft.

Schweinberger, Michael, Bomiriya**, Rashmi P., and Sergii Babkin* (2022). A semiparametric Bayesian approach to epidemics, with application to the spread of the coronavirus MERS in South Korea in 2015. Accepted, *Journal of Nonparametric Statistics,* 1–35.

Park, Jaewoo, Jin, Ick Hoon, and **Michael Schweinberger** (2022). Bayesian model selection for high-dimensional Ising models, with applications to educational data. Accepted, *Computational Statistics & Data Analysis,* 165, 1–20.

Schweinberger, Michael (2021+). Discussion to: "Bayesian graphical models for modern biological applications" by Yang Ni, Veerabhadran Baladandayuthapani, Marina Vannucci, and Francesco C. Stingo. Accepted, *Statistical Methods & Applications (Journal of the Italian Statistical Society),* 1–8. **Invited.**

Published papers

Students funded by me are indicated by * and other students are indicated by **. Stewart* is tenure-track Assistant Professor, Department of Statistics, Florida State University. Babkin* is Senior Data & Applied Scientist, Microsoft.

Jeon, Minjeong, Jin, Ick Hoon, **Schweinberger, Michael,** and Samuel Baugh** (2021). Mapping unobserved item-respondent interactions: A latent space item response model with interaction map. *Psychometrika,* 86, 378–403. **The first three authors made equal contributions. The order of the first three authors is alphabetical.**

Schweinberger, Michael and Jonathan R. Stewart* (2020). Concentration and consistency results for canonical and curved exponential-family models of random graphs. *The Annals of Statistics,* 48, 374–396.

Schweinberger, Michael (2020). Consistent structure estimation of exponential-family random graph models with block structure. *Bernoulli,* 26, 1205–1233.

Schweinberger, Michael, Krivitsky, Pavel N., Butts, Carter T., and Jonathan R. Stewart* (2020). Exponential-family models of random graphs: Inference in finite, super, and infinite population scenarios. *Statistical Science,* 35, 627–662.

Babkin*, Sergii, Stewart*, Jonathan R., Long**, Xiaochen, and **Michael Schweinberger** (2020). Large-scale estimation of random graph models with local dependence. *Computational Statistics & Data Analysis,* 152, 1–19.

Schweinberger, Michael (2020). Statistical inference for continuous-time Markov processes with block structure based on discrete-time network data. *Statistica Neerlandica,* 74, 342–362.

Schweinberger, Michael (2019). Random graphs. *Wiley StatsRef: Statistics Reference Online.* Edited by Brian Everitt, Geert Molenberghs, Walter Piegorsch, Fabrizio Ruggeri, Marie Davidian, and Ron Kenett. **Invited.**

Stewart*, Jonathan R., **Schweinberger, Michael,** Bojanowski, Michal, and Martina Morris (2019). Multilevel networks facilitate statistical inference for curved ERGMs with geometrically weighted terms. *Social Networks,* 59, 98–119.

Schweinberger, Michael and Pamela Luna** (2018). hergm: Hierarchical exponential-family random graph models. *Journal of Statistical Software,* 85, 1–39.

Cao**, Ming, Chen, Yong, Fujimoto, Kayo, and **Michael Schweinberger** (2018). A two-stage working model strategy for network analysis under hierarchical exponential random graph models. *Proceedings of the 2018 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining,* 290–298. Acceptance rate: 15%.

Schweinberger, Michael, Babkin*, Sergii, and Katherine B. Ensor (2017). High-dimensional multivariate time series with additional structure. *Journal of Computational and Graphical Statistics,* 26, 610–622.

Schweinberger, Michael and Mark S. Handcock (2015). Local dependence in random graph models: Characterization, properties and statistical inference. *Journal of the Royal Statistical Society, Series B (Statistical Methodology),* 77, 647–676.

Schweinberger, Michael, Petrescu-Prahova, Miruna, and Duy Q. Vu** (2014). Disaster response on September 11, 2001 through the lens of statistical network analysis. *Social Networks,* 37, 42–55.

Vu**, Duy Q., Hunter, David R., and **Michael Schweinberger** (2013). Model-based clustering of large networks. *The Annals of Applied Statistics,* 7, 1010–1039.

Hunter, David R., Krivitsky, Pavel N., and **Michael Schweinberger** (2012). Computational statistical methods for social network models. *Journal of Computational and Graphical Statistics,* 21, 856–882. **Invited. The authors made equal contributions. The order of authors is alphabetical.**

Schweinberger, Michael (2012). Statistical modeling of network panel data: goodness-of-fit. *British Journal of Mathematical and Statistical Psychology*, 65, 263–281.

Schweinberger, Michael (2011). Instability, sensitivity, and degeneracy of discrete exponential families. *Journal of the American Statistical Association, Theory & Methods,* 106, 1361–1370.

Lospinoso**, Joshua, **Schweinberger, Michael**, Snijders, Tom A.B., and Ruth Ripley (2011). Assessing and accounting for time heterogeneity in stochastic actor oriented models. *Advances in Data Analysis and Classification*, 5, 147–176.

Snijders, Tom A.B., Koskinen, Johan, and **Michael Schweinberger** (2010). Maximum likelihood estimation for social network dynamics. *The Annals of Applied Statistics*, 4, 567–588.

Schweinberger, Michael and Tom A.B. Snijders (2007). Markov models for digraph panel data: Monte Carlo-based derivative estimation. *Computational Statistics and Data Analysis*, 51, 4465–4483.

Snijders, Tom A.B., Steglich, Christian E.G. and **Michael Schweinberger** (2007). Modeling the co-evolution of networks and behavior. In: Van Montfort, K., Oud, H. and A. Satorra (editors). Longitudinal models in the behavioral and related sciences. Mahwah, NJ: Lawrence Erlbaum.

Schweinberger, Michael and Tom A.B. Snijders (2003). Settings in social networks: A measurement model. *Sociological Methodology*, 33, 307–341.

Other publications

- **Schweinberger, Michael,** Stingo, Francesco C., and Maria P. Vitale (2021). Special issue on statistical analysis of networks. *Statistical Methods & Applications (Journal of the Italian Statistical Society),* 30, 1285–1288.

- **Schweinberger, Michael** (2007). Statistical Methods for Studying the Evolution of Networks and Behavior. Ph.D. thesis, University of Groningen, NL.

Unpublished preprints

Schweinberger, Michael, Krivitsky, Pavel N., and Carter T. Butts (2017). A note on the role of projectivity in likelihood-based inference for random graph models. **The first two authors made equal contributions.**

Vu**, Duy Q. and **Michael Schweinberger** (2014). Model-based clustering of large random graphs with high-dimensional predictors.

Schweinberger, Michael and Tom A.B. Snijders (2007). Random effects models for digraph panel data.