**“THEORY AND METHODS OF EXPONENTIAL RANDOM GRAPH MODELING”**

Summer School, 2016

**Preliminary Schedule**

| **Date** | **Time** | **Event** |
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| **Day 1**  Monday, July 4th | 9:30-10:00 | Morning coffee |
| 10:00-11:30 | What is distinctive about networks and network analysis? |
| 11:40-13:10 | Social network study design |
| 13:10-13:50 | Lunch (catered) |
| 13:50-16:40 | Network data specifications  Density, Reciprocity and Transitivity |
| 16:40-17:00 | Coffee Break |
| 17:00-18:40 | Formulating network research questions |
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| **Day 2**  Tuesday, July 5th | 9:30-10:00 | Morning coffee |
| 10:00-11:30 | Cohesion and connectivity |
| 11:40-13:10 | Influential nodes and degree distributions |
| 13:10-13:50 | Lunch (catered) |
| 13:50-16:40 | Actor attributes |
| 16:40-17:00 | Coffee break |
| 17:00-18:40 | Multivariate and bipartite networks |
| **Day 3**  Wednesday, July 6th | 9:30-10:00 | Morning coffee |
| 10:00-11:30 | The need for a statistical model for social networks |
| 11:40-13:10 | ERGM Rationale |
| 13:10-13:50 | Lunch (catered) |
| 13:50-16:40 | Introducing PNet  ERGMs and Dependence Assumptions |
| 16:40-17:00 | Coffee break |
| 17:00-18:40 | ERGM goodness of fit |
| **Day 4**  Thursday, July 9th | 9:30-10:00 | Morning coffee |
| 10:00-11:30 | ERGMs for directed networks |
| 11:40-13:10 | Actor and dyadic attributes |
| 13:10-13:50 | Lunch (catered) |
| 13:50-16:40 | Bipartite ERGMs  ERGMs for multiple networks |
| 16:40-17:00 | Coffee break |
| 17:00-18:40 | Autologistic Actor Attribute Models |
| **Day 5**  Thursday, July 10th | 9:30-10:00 | Morning coffee |
| 10:00-11:30 | Multilevel ERGMs |
| 11:40-13:10 | Bayesian estimation |
| 13:10-13:50 | Lunch (catered) |
| 13:50-16:40 | Missing Data  Snowball sampling |
| 16:40-17:00 | Coffee break |
| 17:00-18:40 | ERGM for network structure and individual outcomes |