**“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 |
| 10:00-13:15 | What is distinctive about networks and network analysis? |
|  | Social network study design |
| 13:15-14:15 | Lunch (catered) |
| 14:15-18:30 | Network data specifications |
|  | Density, Reciprocity and Transitivity |
|  | 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 |
|  | Influential nodes and degree distributions |
| 13:15-14:15 | Lunch (catered) |
| 14:15-18:30 | Actor attributes |
|  | Multivariate and bipartite networks |
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| **Day 3**  Wednesday, July 6th | 9:30-10:00 | Morning coffee |
| 10:00-11:30 | The need for a statistical model for social networks |
|  | ERGM Rationale |
| 13:15-14:15 | Lunch (catered) |
| 14:15-18:30 | Introducing PNet  ERGMs and Dependence Assumptions |
|  | ERGM goodness of fit |
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| **Day 4**  Thursday, July 7th | 9:30-10:00 | Morning coffee |
| 10:00-11:30 | ERGMs for directed networks |
|  | Actor and dyadic attributes |
| 13:15-14:15 | Lunch (catered) |
| 14:15-18:30 | Bipartite ERGMs  ERGMs for multiple networks |
|  | Autologistic Actor Attribute Models |
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| **Day 5**  Friday,  July 8th | 9:30-10:00 | Morning coffee |
| 10:00-11:30 | Multilevel ERGMs |
|  | Bayesian estimation |
| 13:15-14:15 | Lunch (catered) |
| 14:15-18:30 | Missing Data  Snowball sampling |
|  | ERGM for network structure and individual outcomes |
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