

Cambridge Networks Day 2019 – Blog Post by George Gifford

In going to CNDay I hoped to get some insight into current movements in network science and to network with some researchers who might be working in my own area. The conference provided both, there were talks on new network approaches (e.g. Ginestra Bianconi's talk on multilayer networks), as well as the opportunity to get into discussions with other researchers, particularly during the poster presentations.

I also found myself appreciating the range of applications that were outside of my own research bubble. Topics like crime, economics, and the career progression of scientists were covered, which given a network application were inherently interesting. The one minute poster orals were useful in getting a quick overview for some broad subject matters.

Some talks that stood out to me (given my own interests), included Charlotte Deane's talk on measuring rank robustness, which described measurements for judging the consistency of network structure over thresholds, with examples from analyses of large protein interaction networks. This talk essentially suggested a practical approach to measuring the problematic effects of thresholding.

Danielle Bassett gave a fascinating talk about networks of knowledge in human learning, describing how the learning process involves a network of connected pieces of knowledge and how such an approach could inform theories and practices of learning. She also covered the time-evolving modular structure, and the controllability of brain networks, which are dynamic ways of understanding brain function.

I'd recommend CNDay both to those looking to meet others in the network science community and those interested in applied applications of network science. Other researchers I met there were from a broad church, with backgrounds including (but not limited to) data science, physics, finance, and neuroimagers like myself.

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