Ki-Net–CNA Workshop: Groups and interactions in data, networks and biology

Carnegie Mellon University Department of Mathematical Sciences May 27–29, 2015

Confirmed Participants

Mikhail Belkin Andrea Bertozzi Alfred Bruckstein Jian-Guo Liu Mauro Maggioni Georgi Medvedev Cristopher Moore Mason Porter Ohio State University University of California, Los Angeles Technion Duke University Duke University Drexel University Santa Fe Institute University of Oxford Individuals and agents in many systems spontaneously organize to form structures such as flocks, swarms, and clusters. Investigating the principles that govern the formation and behavior of large groups in natural systems requires understanding the structure of clusters, their connectivity, how their identities develop, and how information propagates. Similar goals are also important in statistics and machine learning for understanding massive clouds of highdimensional data, where one relies on properties of graphs encoding data similarity. Likewise connectivity and structure play an important role in studies of network dynamics.

Amit SingerPrinceton UniversityFlorian TheilUniversity of WarwickJames von BrechtCalifornia State University, Long Beach

Organizers:

Robert Pego, Carnegie Mellon University, rpego@cmu.edu **Dejan Slepčev**, Carnegie Mellon University, slepcev@math.cmu.edu **Eitan Tadmor**, University of Maryland, tadmor@cscamm.umd.edu A limited amount of travel and local lodging is available for researchers in the early stages of their career who want to attend the full program, especially for graduate students and post-doctoral fellows.

Deadline for applications for support is March 31.

www.ki-net.umd.edu











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Image courtesy of Jeub, Balachandran, Porter, Mucha, and Mahoney.