1106-05-1837 **Christian Borgs*** (borgs@microsoft.com), Microsoft Research, One Memorial Drive, Cambridge, MA 02142. *Non-parametric block model estimation for sparse graphs.* Preliminary report.

When analyzing large networks, statisticians often assume a generative model in which the observed graph is assumed to come from a stochastic block model, i.e., a random graph with inhomogeneous edge probabilities given in terms of a small block matrix. A non-parametric version of these stochastic block models are so-called W-random graphs, given in terms of an integrable, symmetric function W on the unit square. In this talk I discuss the question on how to recover a good approximation to W from just a single sample of a W-random graph, and relate it to the theory of convergence of sparse graphs. (Received September 15, 2014)