Vertex exchangeable and edge exchangeable random graphs

Svante Janson

Uppsala University

A vertex exchangeable random graph is constructed by first giving each vertex a random (i.i.d.) type in some type space, and then giving each pair of vertices an edge with a probability that depends on the types of the two vertices (in an arbitrary way); these random graphs form a natural generalization of the "Erdős-Rényi" random graph G(n,p) and have been studied by many authors, for example in connection with graph limits. Recently, a class of edge exchangeable random graphs has been introduced. I will present some properties of these two classes, and differences between them.