1116-05-2488 **Tom Bohman*** (tbohman@math.cmu.edu), Carnegie Mellon University, 5000 Forbes Ave, Pittsburgh, PA 15213. *Random greedy hypergraph processes.*

Let $\mathcal{H}$ be a D-regular, r-uniform hypergraph on n vertices. In this talk we consider the random greedy algorithms for producing matchings and independent sets on $\mathcal{H}$. The random greedy matching algorithm builds a matching by adding edges selected uniformly at random one at a time, subject to the condition that each selected edge does not intersect any previously selected edge. The random greedy independent set algorithm builds an independent set by adding vertices one at a time which are chosen uniformly at random subject to the condition that the collection of selected vertices never contains an edge of $\mathcal{H}$. In this talk we survey some recent applications of these processes and discuss some open problems. (Received September 22, 2015)