DIRECTED RANDOM TREES, CONVERGENCE TO BROWNIAN WEB AND SOME APPLICATIONS

by *Anish Sarkar*

In this talk, we consider various models of directed random trees, originating from various fields such drainage network models, percolation models etc. Most of these models, under a suitable scaling, converge to the Brownian web. The Brownian web can be loosely described as the a coalescing system of Brownian paths, with paths starting from every point of the two dimensional plane. This convergence can further be exploited to derive results about the models and we will provide couple of examples.