

An introduction to Unimodular Random Discrete Metric Spaces.  
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The notion of unimodular random graphs received more interests during last years. The article “Processes on Unimodular Random Networks” (2007) by D. Aldous and R. Lyons gathered several results in a more general framework which is called as unimodular random networks. More recently the special edition of contemporary in mathematics titled as “Unimodularity in Randomly Generated Graphs”, gathered some more recent results on this subject.

In this course we are going to discuss the notion of unimodular random metric spaces. This notion extends the notion unimodular random networks. Then several topics regarding this notion will be discussed. The notion of unimodular Hausdorff and unimodular Mikowski’s dimension will be discussed. Also the notion of Eternal family trees and dynamics on unimodular random graphs will be discussed.

References:

1. Unimodularity in Randomly Generated Graphs
2. Processes on Unimodular Random Networks
3. Unimodular Hausdorff and Minkowski Dimensions