

Contribution Title: ON RANDOM PERMUTATIONS WITH NONUNIFORM DISTRIBUTIONS
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YRS seminar: NO

I will discuss various models of random permutations with nonuniform distributions. One model involves weights that depend on the cycle structure of the permutation. The other models deal with permutations of points in space, and there is an additional weight that involves the length of permutation jumps. The main question is about the possible occurrence of infinite cycles at high enough density. These models of random permutations are motivated by quantum statistical mechanics and by mathematical biology.