

THE SUPERPOSITION MARKOV CHAIN: FINITE OCCUPANCY WITH
COUPLING, AND THE ASYMPTOTICS THEREOF

Bernd Günther

Abstract: Picking up a lottery example by Markov we analyze a variant of the finite occupancy problem that assumes complete symmetry among the target cells but drops the customary assumptions about independence. Assuming that the distribution of the number of non-empty cells approaches a non-trivial asymptotic limit for large state space sizes the limit time evolution is studied.

2000 AMS Mathematics Subject Classification: 60C05, 60F05, 60J10, 94A29.

Keywords and phrases: Random allocation, weak limit theorems, finite Markov chains, Stirling polynomials.

THE FULL TEXT IS AVAILABLE [HERE](#)