PROBABILITY AND MATHEMATICAL STATISTICS Vol. 19, Fasc. 1 (1999), pp. 23–41

LIMIT THEOREMS FOR THE HIERARCHY OF FREENESS

Uwe Franz Romuald Lenczewski

Abstract: The central limit theorem, the invariance principle and the Poisson limit theorem for the hierarchy of freeness are studied. We show that for given $m \in N$ the limit laws can be expressed in terms of non-crossing partitions of depth smaller than or equal to m. For $\mathcal{A} = C[x]$, we solve the associated moment problems and find explicitly the discrete limit measures.

2000 AMS Mathematics Subject Classification: Primary: -; Secondary: -; **Key words and phrases:** -

THE FULL TEXT IS AVAILABLE HERE