PROBABILITY
AND
MATHEMATICAL STATISTICS
Vol. 24, Fasc. 1 (2004), pp. 173–180

NOTE ON THE FACTORIZATION OF THE HAAR MEASURE ON FINITE COXETER GROUPS

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Abstract: In this note we show that for the finite Coxeter groups of types A_n, B_n, D_n, F_4, G_2 and $I_2(m)$ it is possible to choose an appropriate set S of generators of order not greater than 2 and a finite set of probability measures $\{\mu_1, \ldots, \mu_k\}$ with their supports in S such that $\mu_1 * \ldots * \mu_k = \lambda$, where $\lambda(g) = |G|^{-1}$ for every $g \in G$.

2000 AMS Mathematics Subject Classification: 60B15, 43A05.

Key words and phrases: Finite Coxeter groups, factorization, Haar measure, Fourier transform.

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