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## ON THE FOURIER TRANSFORM FOR THE RANDOM MEDIAN QUICKSORT DISTRIBUTION

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### Abstract

The paper presents tail estimates for the characteristic function of the Random Median Quicksort distribution following the approach by Fill and Jansen for classical Quicksort via the stochastic fixed point equation. As a consequence, the Random Median Quicksort distribution has a Lebesgue density.

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Key Words : *Quicksort, Stochastic fixed point equation, Sorting algorithm, Analysis of algorithm, Divide-and-conquer algorithm, Contraction method, Characteristic function.*

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