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**Mellin transforms and asymptotics: Finite differences and Rice's integrals.** (English)

Zbl 0869.68056

Theor. Comput. Sci. 144, No. 1-2, 101-124 (1995).

Summary: High order differences of simple number sequences may be analysed asymptotically by means of integral representations, residue calculus, and contour integration. This technique, akin to Mellin transform asymptotics, is put in perspective and illustrated by means of several examples related to combinatorics and the analysis of algorithms like digital tries, digital search trees, quadtrees, and distributed leader election.

**MSC:**

[68Q25](#) Analysis of algorithms and problem complexity  
[44A15](#) Special integral transforms (Legendre, Hilbert, etc.)  
[68P05](#) Data structures

Cited in **1** Review  
Cited in **61** Documents

**Full Text:** [DOI](#)

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