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*Asymptotics of Decomposable Combinatorial Structures with Components of Alg-Log Type*

*Decomposable combinatorial structures* are structures constructed from smaller structures called *components* which cannot be further decomposed. We assume that the component generating function  $C(z)$  is of alg-log type *i.e.*,  $C(z)$  behaves like

$$(1 - z/\rho)^{-\alpha} \log \left( \frac{1}{1 - z/\rho} \right)^\beta$$

near its dominant singularity  $\rho$ . We determine asymptotic enumerative results in the case  $\alpha = 0, \beta > 0$  and also examine objects whose components are subject to size restrictions. This work extends results of Dong, Gao, Panario and Richmond.