

On the maximal order of the "factorisatio numerorum"

Let $m(n)$ be the number of ordered factorizations of n in factors > 1 . We improve on some claims of P. Erdős concerning the maximal order of the numbers $m(n)$. The proofs use standard techniques in analytic number theory such as the prime number theorem, smooth numbers as well as a detailed analysis of the Riemann zeta function around the real zero ρ of the equation $\zeta(\rho) = 2$.

This is joint work with M. Klazar.