

On the largest prime factors of consecutive integers

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Let $P^+(n)$ denote the largest prime factor of the integer n . One might guess that the density of integers n with $P^+(n) < P^+(n + 1)$ is $1/2$. In fact, this conjecture was formulated in the correspondence of Erdős and Turán in the 1930s. More generally, we may consider this type of problem for k -consecutive integers with $k \geq 3$, or impose some conditions on the integer n . In this talk, we present the progress towards these questions.

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