

Integers with a fixed number of prime factors in short intervals

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Let x be large. We will prove that in almost all (reasonably) short intervals around x , the number of integers with a fixed number of prime factors of the order of magnitude of $\log \log x$ is as expected. This relies essentially on previous work of Matomäki and Radziwiłł, and on a certain independance of the number of prime factors of n and $n + 2$.

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