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**Zbl 790.05008****Erdős, Paul; Richmond, L.B.***On graphical partitions. (In English)***Combinatorica 13, No.1, 57-63 (1993). [0209-9683]**

For even  $n$ , let  $p(n)$  denote the number of partitions of  $n$  and  $G(n)$  denote the number of graphical partitions of  $n$ . A partition  $\pi = (\lambda_1, \lambda_2, \dots, \lambda_m)$  is graphical if there exists a graph with degree sequence  $\pi$ . The authors discuss progress and possible lines in enquiry on the questions of whether or not  $\lim_{n \rightarrow \infty} G(n)/p(n)$  approaches 0, and prove two inequalities:

$$\limsup_{n \rightarrow \infty} \frac{G(n)}{P(n)} \leq .4258, \quad \liminf_{n \rightarrow \infty} n^{1/2} \frac{G(n)}{P(n)} \geq \frac{\pi}{\sqrt{6}}.$$

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05A17 Partitions of integers (combinatorics)

11B83 Special sequences of integers and polynomials

05C99 Graph theory

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