

## On a theorem of Erdos

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**Abstract.** A 1974 theorem of Erdos implies good density results concerning integers  $n < x$ , satisfying the condition  $a < \sigma(n)/n < a(1 + 1/t)$ , for a given  $a > 1$ , and  $2 < t < x$ . In this talk we describe a couple of generalizations of this result, and we discuss some of their applications.

