
Zbl 880.11067**Erdős, Pál; Joó, I.; Schnitzer, F.J.***On Pisot numbers.* (In English)**Ann. Univ. Sci. Budap. Rolando Eötvös, Sect. Math. 39, 95-99 (1996).** [ISSN 0524-9007]

The algebraic integer $1 < q < 2$ is called a Pisot number if $|q_i| < 1$ for all of its conjugates. For a Pisot number q define the set Y by

$$Y = \left\{ \sum_{i=0}^n \varepsilon_i q^i : n \geq 0, \varepsilon_i \in \mathbb{Z}, 0 \leq \varepsilon_i \leq 2 \right\}$$

and let

$$l_2(q) = \inf\{|y_1 - y_2| : y_1, y_2 \in Y, y_1 \neq y_2\}.$$

The authors prove that if $1 < q < (1 + \sqrt{5})/2$, then q is a Pisot number if and only if $l_2(q) > 0$.

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