

A characterization of the distances between Pisot numbers generating the same number field

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Abstract. Let K be a real algebraic number field and let \wp_K be the set of Pisot numbers generating K . We show that the elements of $\wp_K - \wp_K$ are the algebraic integers of K whose images under the action of all embeddings of K into \mathbb{C} , other than the identity of K , are of modulus less than 2. This completes certain previous results due to Dubickas and the second author. Also, from the proof of this result, based on Minkowski's theorem on compact, convex and symmetric bodies, we deduce some related results.

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