Summary: We prove that in a globally subanalytic family of convex bodies the subfamily of zonoids is log-analytic, and in particular it is definable in the o-minimal structure generated by globally subanalytic sets and the graph of the exponential function. This result establishes a connection between Model theory and Functional analysis.

MSC:
68-XX Computer science
05-XX Combinatorics

Keywords:
zonoids; cosine transform; o-minimality

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References:

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