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Given a function $f \in \omega^\omega$ we define family

$$\mathbb{B}_f = \{B \in \text{Borel}(2^\omega) : \lim_{n \rightarrow \infty} f(n)\delta_n(B) = 0\} / \mathcal{N},$$

where $\delta_n(B) = \min\{\lambda(B \Delta C) : C \in \mathcal{C}_n\}$ and \mathcal{C}_n stands for family of clopens which depends only on first n coordinates. One can think of B_f as a family of those subsets of 2^ω , which are well approximated by members of \mathcal{C}_n , with f responsible for speed of this approximation. It is easy to observe that each \mathbb{B}_f is a Boolean algebra. I will present some results concerning \mathbb{B}_f 's and their dependence of f , as well as motivations for considering such algebras. Those motivations are related to Efimov's problem.