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On the $(1/2,+)$ -caloric capacity of Cantor sets

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In this talk we will present the concept of $1/2$ -caloric capacity, an object associated with the $1/2$ -heat equation in \mathbb{R}^{n+1} , i.e. the PDE defined via the pseudo-differential operator $\Theta^{1/2} := (-\Delta_x)^{1/2} + \partial_t$. Such capacity is useful to characterize removable subsets for the latter PDE in terms of some of its measure theoretic properties. The main goal of the talk will be to present a characterization of a variant of the $1/2$ -caloric capacity (defined only using positive measures) of the usual corner-like Cantor set of \mathbb{R}^{n+1} . The results obtained for the latter are analogous to those found for Newtonian capacity.