Submonads of the capacity monad

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ABSTRACT. Two subfunctors of the capacity functor in the category of compacta, namely the functors of cap-capacities and cup-capacities (also known as sup-measures), are introduced. It is proved that these functors generate submonads of the capacity monad, and each capacity on a compact Hausdorff space is the image under the multiplication of the capacity monad of a cup-capacity with support in a subspace of cap-capacities.

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