On ω -Corson and NY compact spaces

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Given a family $\{X_{\gamma} : \gamma \in \Gamma\}$ of topological spaces X_{γ} and a point $a = (a_{\gamma})_{\gamma \in \Gamma} \in X = \prod_{\gamma \in \Gamma} X_{\gamma}$, we define the σ -product in X centered at a as

$$\sigma(X,a) = \{ x \in \prod_{\gamma \in \Gamma} X_{\gamma} : \{ \gamma \in \Gamma : x(\gamma) \neq a_{\gamma} \} < \omega \}.$$

A compact space K is called ω -Corson (resp. NY compact) if K embeds into a σ -product of intervals (resp. a σ -product of compact metric spaces). Clearly, every ω -Corson compactum is NY compact and every NY compact space is Eberlein compact. In this talk we will discuss some recent results about ω -Corson and NY compact spaces, as well as related classes of ω -Valdivia and NY-Valdivia compacta.

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