

On the Arens-Michael decomposition of $CV_{(0)}(X, A)$

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The Arens-Michael decomposition has been a powerful tool to study complete m -convex algebras and their applications. If X is a completely regular Hausdorff space, V a Nachbin family on X and A a locally convex algebra, let $CV_{(0)}(X, A)$ be the function algebra of all weighted vector-valued continuous functions with the topology given by the uniform seminorms induced by V . In this talk we study the Arens-Michael decomposition of this algebra when it is complete and m -convex, and relate it to another projective limit given in terms of the factors of the decomposition of A .