

# CUNTZ-PIMSNER ALGEBRAS ASSOCIATED TO FINITE RANK VECTOR BUNDLES TWISTED BY A MINIMAL HOMEOMORPHISM

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We discuss structural properties of Cuntz-Pimsner algebras arising by continuous sections  $\Gamma(V, \varphi)$  of a complex finite rank vector bundle  $V$  on a compact metric space  $X$  twisted by a minimal homeomorphism  $\varphi : X \rightarrow X$ . In this context, we consider "large enough"  $C^*$ -subalgebras capturing fundamental properties of the containing Cuntz-Pimsner algebra. Then we will examine conditions when these  $C^*$ -algebras can be classified using the Elliott invariant.

In the case of a line bundle, in addition, we are interested in studying the topological full group for the minimal dynamical system  $(X, \varphi)$ , that will shed light on an isomorphism theorem for the associated Cuntz-Pimsner algebras.

The first part is joint work in progress with Archey, Forough, Georgescu, Jeong, Strung, Viola, while the second part is joint work in progress with Forough, Strung.