

---

**KAREN STRUNG**, Institute of Mathematics, Czech Academy of Sciences

*Cuntz-Pimsner algebras associated to C\*-correspondences over commutative C\*-algebras, II*

A full and invertible C\*-correspondence over a commutative C\*-algebra  $C(X)$  is always given by a right module of sections for some line bundle over  $X$ , with left multiplication given by composition with a homeomorphism  $\alpha : X \rightarrow X$ . In this case, the C\*-correspondence has the structure of a Hilbert  $C(X)$ -bimodule, and we can think of the associated Cuntz–Pimsner algebra as a generalised crossed product by this bimodule. When the line bundle is trivial, we get the usual crossed product  $C(X) \rtimes_{\alpha} \mathbb{Z}$ , but in general what we get is a twisted groupoid algebra where the twist is over the transformation groupoid  $X \times_{\alpha} \mathbb{Z}$ . I will discuss these C\*-algebras from the point of view of their classification. This talk will be self-contained, but will also be complementary to the earlier talk by Maria Grazia Viola.

Joint work with M. S. Adamo, D. Archey, M. Forough, M. Georgescu, J. A. Jeong, and M. G. Viola.