1077-46-499 **Ami Viselter*** (viselter@ualberta.ca), Department of Math. and Stat. Sciences, University of Alberta, Edmonton, Alberta T6G 2G1, Canada. *Cuntz-Pimsner algebras for subproduct systems.*

The study of Cuntz-Pimsner algebras of $C^*$-correspondences has its origins in an influential paper of Pimsner. The construction of this algebra (which was shown to be a quotient of the Toeplitz algebra of the correspondence) is very flexible, and many aspects of it have been comprehensively studied, for instance: exactness and nuclearity, ideal structure, K-theory and Morita equivalence.

The notion of a subproduct system, generalizing that of (the product system associated with) a $C^*$-correspondence, has been systematically studied recently by several authors. In particular, some work has been done on its associated tensor and Toeplitz algebras and their representations.

In this talk we will present an attempt to extend the concept of Cuntz-Pimsner algebras to the setting of subproduct systems. When restricted to the case of Arveson's $d$-dimensional "symmetric" subproduct system, our construction yields, as expected, the $C^*$-algebra of continuous functions on the boundary of $B_d$ (and a suitable infinite-dimensional version of this assertion also holds). We demonstrate via examples why some features of the Cuntz-Pimsner algebras of $C^*$-correspondences fail to generalize "easily" to our setting, and discuss what we have instead. (Received September 05, 2011)