

## Editorial

This special issue of the Münster Journal of Mathematics is dedicated to our colleague and friend, Professor Joachim Cuntz, on the occasion of his 60th birthday. To celebrate this event we organized a workshop on Noncommutative Geometry, September 24–27, 2008, at the Department of Mathematics in Münster. Many of the participants at that conference are among the contributors to this special issue.

The work of Joachim Cuntz has had an enormous influence on the theory of Operator Algebras and Noncommutative Geometry. Some of the first examples of  $C^*$ -algebras that a student in this field learns about are certainly the famous Cuntz algebras and their generalizations, the Cuntz-Krieger algebras. In 1981 he introduced the notion of a purely infinite  $C^*$ -algebra, which now plays a prominent role in the classification theory of  $C^*$ -algebras, as does the Cuntz semigroup, an important invariant. His various pictures of Kasparov's bivariant  $K$ -theory have deepened our understanding of this work. More recently, he has succeeded in extending the power of bivariant  $K$ -theories to very general classes of topological algebras outside the rigid world of  $C^*$ -algebras. In joint work with Quillen he obtained new descriptions of cyclic homology and gave a proof of the important excision property in bivariant cyclic cohomology. These are just some of the areas in which the work of Joachim Cuntz has had a deep and lasting influence.

With this special issue of the Münster Journal of Mathematics we would like to congratulate Joachim Cuntz on his many fundamental contributions to mathematics and wish him many more productive and creative years to come!

The Editors

