Seminar/Talk

Operator algebras, representations and discrete dynamical systems

C. Correia Ramos

Departamento de Matemática, CIMA, ECT, Universidade de Évora

Abstract: Methods from symbolic dynamics are used to characterize and classify certain representations of operator algebras, in particular, C*-algebras. The interplay between topological dynamics, ergodic theory and operator algebras, in the last decades, produced an intense development in each area. Two main families of C*algebras are considered: the Cuntz-Krieger algebras, deeply related with Markov systems and graph algebras which provide the conceptual frame to deal with discrete dynamical systems with non-trivial escape sets. A parametrization of certain representations - orbit representations - is given based on iterated maps of the interval. A classification of these types of representations is obtained up to unitary equivalence. The faithfulness of the representations is also discussed.

References

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