

Cartan subalgebras in dimension drop algebra

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Playing a major role in the theory of von Neumann algebras for decades already, in recent years the role of Cartan subalgebras became increasingly important also in the setting of C^* -algebras. In contrast to the state of the art in von Neumann algebras, classification results for Cartan subalgebras have been scarce in the C^* -algebra world, raising a demand for basic examples which can be completely understood. In this talk, I will present work addressing this challenge, providing in particular a complete classification up to conjugacy by an automorphism of Cartan subalgebras in prime dimension drop algebras. It turns out that in this setting two Cartan subalgebras are conjugate if and only if their spectrum is homeomorphic, providing the tamest possible classification result for C^* -algebraic Cartan subalgebras. This is joint work with Selçuk Barlak.