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C*-bundles containing the Effros-Shen algebras

The Effros-Shen algebras are certain simple AF algebras associated to irrational numbers by using continued fraction expansions. They define a continuous C*-bundle over the Polish space of irrational numbers (in the unit interval). The construction gives two distinct finite dimensional C*-algebras at each rational number. These can be thought of as lower and upper limits of Effros-Shen algebras for irrationals approximating the given rational number. This defines a continuous C*-bundle over the disconnected interval, a (locally compact) Cantor set. Together with Ian Mitscher we have found a way to construct C*-bundles over the interval that interpolate the Effros-Shen algebras. This involves a new description of the Effros-Shen algebras as C*-algebras of certain categories of paths. This talk is a report on work in progress, joint with Ian Mitscher.