

ORTHONORMAL BASES GENERATED BY CUNTZ ALGEBRAS

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We show how some orthonormal bases can be generated by representations of the Cuntz algebra such as Fourier bases on fractal measures, generalized Walsh bases on the unit interval and piecewise exponential bases on the middle third Cantor set.

Joint work with Dorin Dutkay (University of Central Florida, USA) and Gabriel Picioroaga (University of South Dakota, USA).