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Eric Weber\* (esweber@iastate.edu), 396 Carver Hall, Department of Mathematics, Ames, IA 50011, Dorin Dutkay (dorin.dutkay@ucf.edu), 4000 Central Florida Blvd, P.O. Box 161364, Orlando, FL 32816, and Deguang Han (deguang.han@ucf.edu), 4000 Central Florida Blvd, P.O. Box 161364, Orlando, FL 32816. Fourier Series and Cantor Sets.

The traditional Cantor middle third set and some of its variations are attractor sets for iterated function systems. Those IFS's also give rise to invariant measures supported on those sets. We investigate the possibility of Fourier Series expansions with respect to those invariant measures. (Received March 04, 2013)