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Marius V Ionescu* (mionescu@colgate.edu), 13 Oak Dr, Hamilton, NY 13346, and **Alex Kumjian**. *Groupoid actions on fractafolds*.

In this talk that we present how we find and analyze symmetries of fractals associated to iterated function systems (F_1, \dots, F_N) . We study the so called fractafold blowups defined by Strichartz endowed with the inductive limit topology and assemble them into a fractafold bundle L . We describe a natural groupoid action on the fractafold bundle. We show that the resulting action groupoid is a Renault-Deaconu groupoid which is determined by a local homeomorphism on L . The action groupoid is shown to be essentially free and to have a dense orbit. It follows that the associated C^* -algebra is primitive. (Received August 21, 2013)