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Lorenzo Sadun* (sadun@math.utexas.edu), Department of Mathematics C1200, 2515 Dean Keaton, Austin, TX 78712. *Rigidity of Model Sets*. Preliminary report.

Many properties of tilings are defined by the combinatorics of the tiling (or an associated point pattern), while others are computed from the associated dynamical systems. So which combinatorial properties are preserved by topological conjugacies? It turns out the the property of being a model set, or even a Meyer set, is NOT preserved.

Suppose that Λ is a model set (aka cut-and-project pattern with a reasonably nice window), and suppose that Λ' is another point pattern, of finite local complexity, such that the dynamical systems defined by Λ and Λ' are topologically conjugate. Then either (a) Λ' is MLD to a reprojection of Λ , or (b) Λ' is not a model set, and is not even a Meyer set. I'll give an example of the second possibility. This is joint work with Johannes Kellendonk. (Received January 16, 2014)