

Microsymposium

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Dynamical Spectrum and Diffraction

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The diffraction spectrum of a point pattern is very closely related to the dynamical spectrum of an associated dynamical system. This dynamical spectrum is invariant under topological conjugacy and measurable conjugacy, and in particular under a large class of shape deformations. Using measure theory and topology, we construct a pure-point diffractive set, with finite local complexity, that is not a Meyer set. This provides a counterexample to a famous conjecture of Lagarias.

[1] J. Kellendonk, L. Sadun, *J. London Math Soc.*, 2013, online [10.1112/jlms/jdt062](https://doi.org/10.1112/jlms/jdt062), **[2]** N. Frank, L. Sadun, *Geometriae Dedicata*, 2013, online [10.1007/s10711-013-9893-7](https://doi.org/10.1007/s10711-013-9893-7)

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