

Dense Dirac combs in Euclidean space with pure point diffraction

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Regular model sets, describing the point positions of ideal quasicrystallographic tilings, are mathematical models of quasicrystals. An important result in mathematical diffraction theory of regular model sets, which are defined on locally compact Abelian groups, is the pure pointedness of the diffraction spectrum. We derive an extension of this result, valid for dense point sets in Euclidean space, which is motivated by the study of quasicrystallographic random tilings.

Reference: <http://www.esi.ac.at/Preprint-shadows/esi1275.html>