

Topological Invariants for Projection Method Patterns (Paperback)

By Alan Forrest, John Hunton, Johannes Kellendonk

American Mathematical Society, United States, 2002. Paperback. Book Condition: New. 200 x 171 mm. Language: English . Brand New Book. This memoir develops, discusses and compares a range of commutative and non-commutative invariants defined for projection method tilings and point patterns. The projection method refers to patterns, particularly the guasiperiodic patterns, constructed by the projection of a strip of a high dimensional integer lattice to a smaller dimensional Euclidean space. In the first half of the memoir the acceptance domain is very general - any compact set which is the closure of its interior - while in the second half we concentrate on the so-called canonical patterns. The topological invariants used are various forms of \$K\$-theory and cohomology applied to a variety of both \$C^*\$-algebras and dynamical systems derived from such a pattern. The invariants considered all aim to capture geometric properties of the original patterns, such as quasiperiodicity or selfsimilarity, but one of the main motivations is also to provide an accessible approach to the the \$K 0\$ group of the algebra of observables associated to a quasicrystal with atoms arranged on such a pattern. The main results provide complete descriptions of the (unordered) \$K\$-theory and cohomology of codimension 1...



Reviews

The most effective pdf i ever go through. It is probably the most incredible book i have got study. You wont sense monotony at at any time of the time (that's what catalogues are for relating to if you check with me). -- Ahmad Heaney

The ebook is fantastic and great. I am quite late in start reading this one, but better then never. I am just pleased to inform you that this is the greatest book i have got study inside my personal daily life and could be he best pdf for at any time.

-- Miss Shany Tillman