

Almost periodic patterns and quasicrystals.

Yves Meyer (Académie des sciences et ENS Cachan)

Quasicrystals are almost periodic structures. This belongs to the folklore but depends on the definition of almost periodicity which is being used. This issue has already been discussed in a paper published in the African Diaspora Journal of Mathematics (Volume 13, Number 1, pp. 1–45 (2012)). Here we give another approach based on the analysis of patches of a quasicrystal. Patches became one of the most powerful tools in image processing. This is a joint work with Pierre-Antoine Guihéneuf.