A global construction of homogeneous planar STIT tessellations

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Abstract
Homogeneous (stationary) random tessellations of the Euclidean plane are constructed which have the characteristic property to be stable with respect to iteration (or nesting), STIT for short. A new approach is presented that describes the tessellation in the whole plane. So far, it was only known how to construct those tessellations within bounded windows.

Key words: stochastic geometry; random tessellation; Poisson point processes; iteration/nesting of tessellations; stability of distributions

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