

1107-00-256

Jason Siefken* (siefkenj@uvic.ca), 3800 Finnerty Road, Department of Mathematics and Statistics, University of Victoria, Victoria, BC V8P 5C2, Canada. *A Minimal Subsystem of the Kari Culik Tilings.*

The set of 13 Kari Culik tiles is currently the smallest known set of Wang tiles (square tiles with colored edges and the rule that two tiles may lie adjacent iff their common edges share the same color) that tile the plane only in an aperiodic way. They do so for fundamentally different reasons than previously known tilings. A subset of Kari Culik tilings have rows which may be interpreted as Sturmian sequences. This talk will show how this Sturmian-like subset can be thought of as a generalization of rotation sequences and how to get explicit waiting time bounds for $n \times m$ configurations. (Received January 16, 2015)