

1135-60-1406

Sevak Mkrtchyan* (sevak.mkrtchyan@rochester.edu), Department of Mathematics 915 Hylan Hall, Box 270138, University of Rochester, Rochester, NY 14627. *Turning point processes in plane partitions with periodic weights of arbitrary period.*

In the thermodynamic limit of the lozenge tiling model the frozen boundary develops special points where the liquid region meets with two different frozen regions. These are called turning points. It was conjectured by Okounkov and Reshetikhin that in the scaling limit of the model the local point process near turning points should converge to the GUE corners process. We will discuss the appearance of frozen regions of arbitrary rational slope when weights in the model are periodic in one direction with arbitrary fixed finite period, and what these new frozen regions mean for the turning process. (Received September 21, 2017)