

A variational principle for multiply-connected domains in Domino world.

Nikolai Kuchumov

LPSM

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Aztec diamond of order N , $AD_N := \{(x, y) \in \mathbb{Z}^2 \mid |x| + |y| \leq N\}$

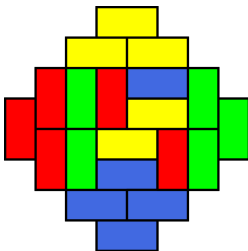


Рис. 1: Aztec diamond AD_4 .

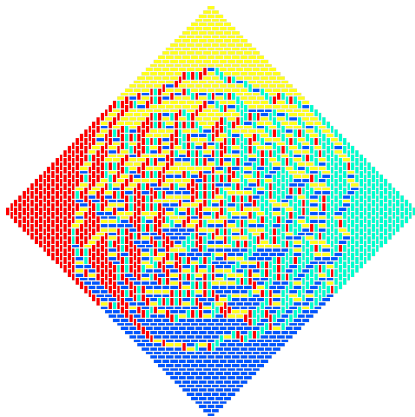


Рис. 2: Typical domino tiling of large Aztec diamond.

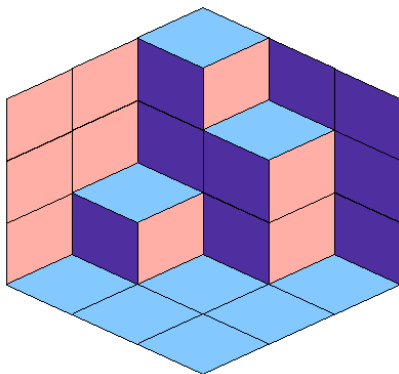


Рис. 3: A lozenge tiling

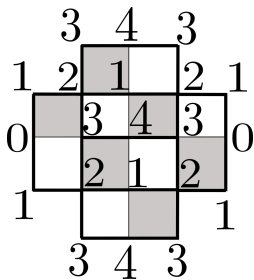


Рис. 4: Height function of Aztec diamond AD_4 .

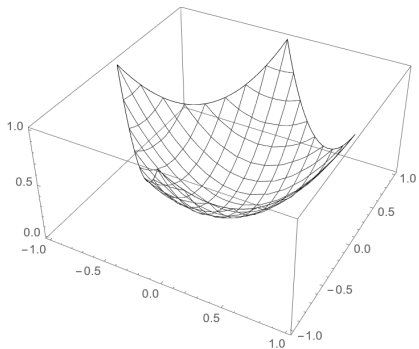


Рис. 5: Plot of h^* for the Aztec diamond

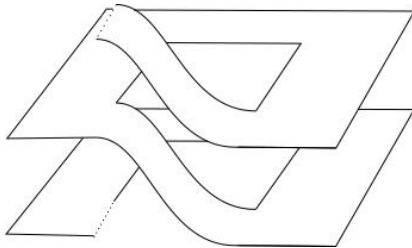
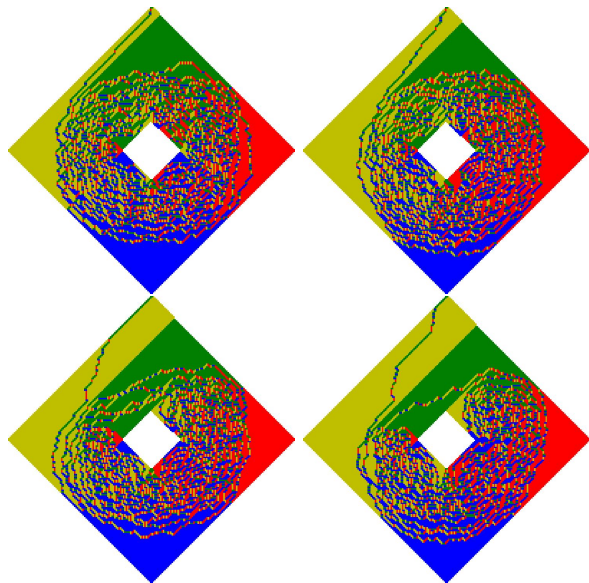


Рис. 6: Two sheets of the surface



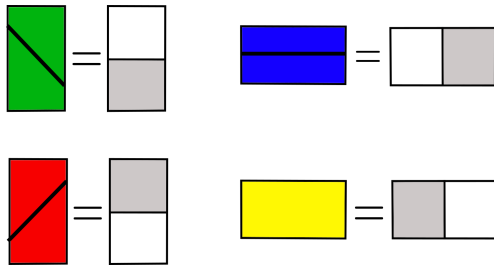


Рис. 7: Bijection between lattice-path-ensemble and domino tiling

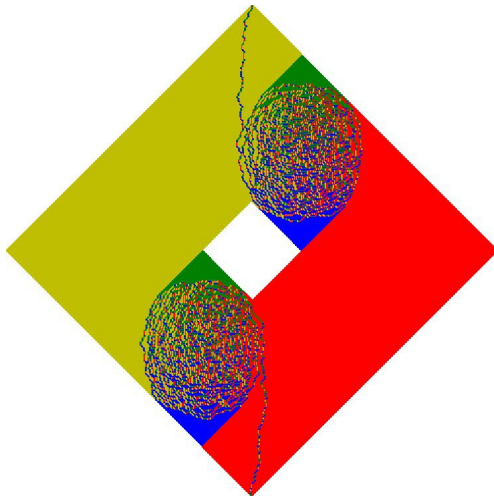
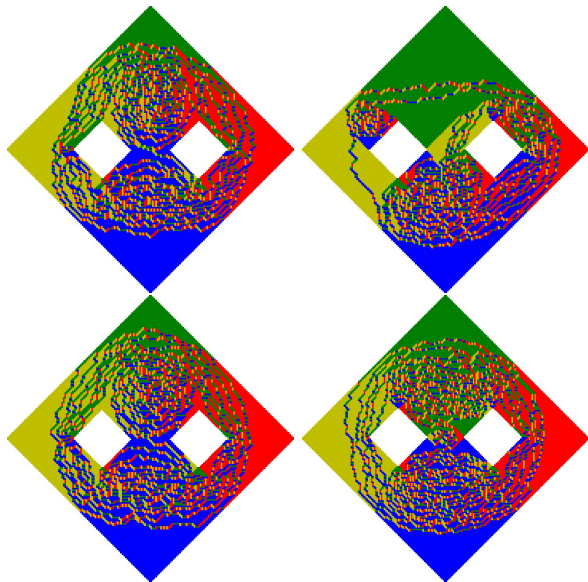


Рис. 8: A typical tiling for the maximal height change



The image features a hypnotic spiral background composed of concentric circles in shades of red and black. The spiral starts from a central black circle and expands outwards. Overlaid on this background is the text "The End" in a white, cursive, handwritten-style font. The text is centered horizontally and vertically, with the words "The" and "End" connected together. The white text has a slight drop shadow, making it stand out against the dark background.

The End