



Факультет математики и компьютерных наук
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КОЛЛОКВИУМ

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Upward Book Embeddings of st -Graphs

A k -page upward book embedding (k UBE) is a topological representation of a directed graph in a k -page book: the vertices are drawn along the spine of the book, the edges are represented by semi-circles on the pages of the book and the requirements are that all edges point in the same direction and no two edges on the same page intersect. Computing k UBE of directed graphs is a widely studied combinatorial problem, which finds applications in a variety of domains ranging from VLSI design to computational origami.

In this talk, I will concentrate on our recent positive results on 2UBEs of planar st -graphs, a wide class of planar directed acyclic graphs. On the algorithmic side, I will present polynomial-time algorithms for testing the existence of 2UBEs of planar st -graphs with branchwidth β and of plane st -graphs whose faces have a special structure. On the combinatorial side, I will present two notable families of plane st -graphs that always admit a 2UBE.

Приглашаются все желающие!