Random embeddings of graphs in surfaces

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Abstract

Homeomorphism classes of 2-cell embeddings of a graph in orientable surfaces are in bijective correspondence with rotation systems around each vertex of the graph. By taking random local rotations, we can speak about random 2-cell embeddings (in orientable surfaces). The speaker will start with motivating examples, overview known results, and discuss some recent progress obtained jointly with Jesse Campion Loth, Tomas Masarik, and Robert Samal.