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„Geometrize 2-dimensional Artin groups and their finitely presented subgroups."

Abstract:
We would like to understand the geometry of 2-dimensional Artin groups. We show that any finite presented subgroup of a 2-dimensional Artin group acts properly and cocompactly on a complex whose minimal disks are non-positively curved, and discuss some group theoretic and geometric consequences of this. We also discuss a variant of our construction in the special case of large-type Artin groups, which is more combinatorial in flavor and gives rise to results of different type. This is joint work with D. Osajda.