Lubbes, Niels
Möbius automorphisms of surfaces with many circles. (English) Zbl 07473358
Can. J. Math. 74, No. 1, 42-71 (2022)

Summary: We classify real two-dimensional orbits of conformal subgroups such that the orbits contain two circular arcs through a point. Such surfaces must be toric and admit a Möbius automorphism group of dimension at least two. Our theorem generalizes the classical classification of Dupin cyclides.

MSC:
14J50 Automorphisms of surfaces and higher-dimensional varieties
51B10 Möbius geometries
51N30 Geometry of classical groups
14C20 Divisors, linear systems, invertible sheaves

Keywords:
surface automorphisms; weak del Pezzo surfaces; Möbius geometry; circles; Lie algebras; toric geometry; lattice geometry

Full Text: DOI

References:

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.