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Holomorphic Lie group actions on Danielewski surfaces. (English) Zbl 07742038
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Summary: We prove that any Lie subgroup $G$ (with finitely many connected components) of an infinite-dimensional topological group $G$ which is an amalgamated product of two closed subgroups can be conjugated to one factor. We apply this result to classify Lie group actions on Danielewski surfaces by elements of the overshear group (up to conjugation).

MSC:
32M17 Automorphism groups of $\mathbb{C}^n$ and affine manifolds
22E60 Lie algebras of Lie groups

Keywords:
Danielewski surfaces; automorphisms; overshears; free amalgamated product; Lie group actions; one-parameter subgroups

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