

On one-dimensional foliations on the plane

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Definition 1. A mapping $p \in C(X, Y)$ is called *compact-covering* if for every compact subset $L \subset Y$ there exists a compact subset $K \subset X$ such that $p(K) = L$.

Theorem 2 (See [1]). *Let Δ be a (topological) one-dimensional foliation on the plane \mathbb{R}^2 . Then the quotient mapping $p : \mathbb{R}^2 \rightarrow Y = \mathbb{R}^2/\Delta$ onto its space of leaves Y is compact-covering.*

We will give an exposition of the proof of this theorem, which is slightly different from the one given in [1].

REFERENCES

- [1] Sergiy Maksymenko and Eugene Polulyakh. Automorphisms and endomorphisms of partitions of topological spaces. *Ukr. Math. J.*, 78(1–2):47–70, 2026. doi:10.3842/umzh.v78i1-2.8932.