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**Ewa Tyszkowska\*** ([ewa.tyszkowska@math.univ.gda.pl](mailto:ewa.tyszkowska@math.univ.gda.pl)), Institute of Mathematics, University of Gdansk, Wita Stwosza 57, 80-952 Gdansk, Poland. *Application of theory of coverings in a study of Riemann surfaces*. Preliminary report.

Every covering of a topological space  $X$  is isomorphic with one obtained from the universal covering of  $X$  and an action of the fundamental group  $\pi(X, x)$  on some set  $T$ . In particular, for any homomorphism of groups  $\theta : \pi(X, x) \rightarrow G$  we can make  $G$  into a  $\pi(X, x)$ -set and obtain  $G$ -covering of  $X$ . We study the covering of  $X$  constructed from its universal covering and the action of  $\pi(X, x)$  on the set  $F$  of fixed points of  $G$  focusing our attention on the case when  $G$  is an automorphism group of a Riemann surface. We show how to determine presentation of such a group  $G$  with central automorphism  $\delta$  by considering the set of fixed points of  $\delta$ . Furthermore, we apply theory of coverings to study Riemann surfaces. (Received August 29, 2009)