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## Classifying Finite-Sheeted Covering Mappings of Paracompact Spaces

The well-known classical classification theorem of the covering space theory refers to covering mappings of connected spaces, where the base space is locally pathwise connected and semi-locally 1-connected. Here, we give a classification theorem for finite-sheeted covering mappings over connected paracompact spaces. It establishes a bijection between the set of all pointed equivalence classes of  $s$ -sheeted pointed covering mappings  $f: (X, *) \rightarrow (Y, *)$  over connected paracompact space  $(Y, *)$  and the set of all subprogroups of index  $s$  of the fundamental progroup  $\pi_1(Y, *)$ . In the unpointed case it establishes a bijection between the set of all of all equivalence classes of  $s$ -sheeted covering mappings  $f: X \rightarrow Y$  and the set of all conjugacy classes of subprogroups of index  $s$  of the fundamental progroup  $\pi_1(Y, *)$ , where  $*$  is an arbitrary chosen point of  $Y$ . Finite-sheeted covering mappings of torus-like continua will be considered, as an application of the theorem.

### References:

- [1] V. Matijević, Classifying finite-sheeted covering mappings of paracompact spaces, (to appear in *Revista Matematica Complutense*).