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# Projection modulo compact factor

[1]

Let  $Y$  be a topological space. Then  $Y$  is compact  $\iff$  for every topological space  $X$  the projection

$$\pi_1 : X \times Y \rightarrow X$$

is **closed**.

Current note has 0 direct children and 0 total descendants.

- structures based on sets
  - Topological spaces
    - map
      - Projection modulo compact factor

And it has 12 siblings.

- structures based on sets
  - Topological spaces
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      - When is a local homeomorphism between topological spaces a closed map?

1. [general topology - Projection map being a closed map - Mathematics Stack Exchange](#) ↔