Dimitrios N. Georgiou, Nodirbek K. Mamadaliev, Rustam M. Zhuraev

A note on functional tightness and minitightness of space of the G-permutation degree

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Abstract: We study the behavior of the minimal tightness and functional tightness of topological spaces under the influence of the functor of the permutation degree. Analytically: a) We introduce the notion of τ-open sets and investigate some basic properties of them. b) We prove that if the map $f\colon X \to Y$ is τ-continuous, then the map $SP^n f\colon SP^n X \to SP^n Y$ is also τ-continuous. c) We show that the functor SP^n preserves the functional tightness and the minimal tightness of compacts. d) Finally, we give some facts and properties on τ-bounded spaces. More precisely, we prove that the functor of permutation degree SP^n preserves the property of being τ-bounded.

Keywords: τ-open set; τ-bounded space; functional tightness; minimal tightness
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