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Attouch-Wets convergence and Kuratowski convergence on compact sets

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Abstract: Let X be a locally connected, b -compact metric space and E a closed subset of X . Let \mathbb{G} be the space of all continuous real-valued functions defined on some closed subsets of E . We prove the equivalence of the τ_{aw} and τ_K^c topologies on \mathbb{G} , where τ_{aw} is the so called Attouch-Wets topology, defined in terms of uniform convergence of distance functionals, and τ_K^c is the topology of Kuratowski convergence on compacta.

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