Invariants of Pairs of Compact Convex Sets

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Abstract: In a recent paper P. Diamond, P. Kloeden, A. Rubinov and A. Vladimirov [3] investigated comperative properties of three different metrics in the space of pairs of compact convex sets. These metrics describe invariant properties of the Rädström-Hörmander lattice [5] i.e. the space of equivalence classes of pairs of nonempty compact convex sets. In this paper we consider invariants of a class of equivalent pairs of nonempty compact convex sets. We show that the affine dimension of the minimal representant of an equivalence class is invariant and that each equivalence class has invariant convexificators.

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