

**THE SYMMETRIZED POLYDISC CANNOT BE
EXHAUSTED BY DOMAINS BIHOLOMORPHIC TO
CONVEX DOMAINS**

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The symmetrized polydisc \mathbb{G}_n is defined as the image of the unit polydisc $\mathbb{D}^n \subset \mathbb{C}^n$ under the map with components the symmetric functions of n complex variables. The symmetrized bidisc \mathbb{G}_2 is the first example of a bounded pseudoconvex domain, which is not biholomorphic to any convex domain and on which the Carathéodory and Kobayashi distances coincide. The aim of the talk is to show that the symmetrized polydisc \mathbb{G}_n , $n \geq 2$, cannot be exhausted by domains biholomorphic to convex domains.

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