

Spheres of positive elements as metric invariants

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We shall review the highlights and achievements on a variant of the celebrated Tingley's problem. The program is aimed to determine how in certain partially ordered Banach spaces and Banach algebras, the sphere of norm-one elements in the positive cone is a metric invariant. We shall be particularly interested in the case of $B(H)$ spaces, C^* -algebras, von Neumann algebras, and JBW^* -algebras.

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