Adjacency preservers

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Abstract

Two matrices are said to be adjacent if their difference is of rank one. Fundamental theorems of geometry of matrices describe the general form of bijective maps on various spaces of matrices preserving adjacency in both directions. We will present some recent improvements of these results and discuss connections with geometry and applications in mathematical physics.

Keywords

Adjacency, Coherency, Geometry of matrices, Grassmann space, Bounded observable, Effect algebra, Minkowski space.

References

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