



Why

The set of positive semidefinite matrices turns out to be a cone in the vector space of $n \times n$ matrices.

Main result

Proposition 1. \mathbf{S}_+^d is a convex, pointed, closed cone with interior \mathbf{S}_{++}^d relative to \mathbf{S}^d .¹

The cone of positive definite matrices is open.

¹Future editions will contain a proof.

