Eventually Cone Positive Semigroups of Linear Operators

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Abstract

A systematic theory has been developed on eventually positive semigroups of linear operators on some Banach lattices. This development has advanced previous work on the notion of positivity(nonnegativity) of operators(matrices) and applications. One such prior work examined the reachability and holdability of nonnegative states for linear differential systems and utilised the notion of Perron-Frobenious type properties. In this presentation, I will discuss further work in progress on cone positivity of linear operators. With a genesis based on recent work by Daners et.al., I will illustrate some similarities and variations between finite and infinite dimensional settings for this theory and explore possible extensions. [1]

References

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[1]The presenter absolves all the authors of the cited and referenced materials from any errors or misrepresentation during the talk

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