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*Extensions of Perron–Frobenius Theorem to semigroups of positive operators on Banach lattices*

The classical Perron–Frobenius Theorem asserts that if a positive matrix has no (proper non-zero) invariant order ideals (i.e., subspaces spanned by subsets of the standard basis) then the spectral radius of this matrix is an eigenvalue, and the corresponding eigenvector is unique and strictly positive (up to scaling). There has been several important extensions of this result. Instead a positive matrix, one can consider a semigroup of positive operators on a Banach lattice. We prove versions of the Perron–Frobenius Theorem as well as some other interesting properties of such semigroups.