Spectral Radius of Weighted Endomorphisms on Generalized Countable Markov Shifts

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We show that for transitive Cuntz-Krieger algebras for infinitely many symbols such that we can continuously extend the shift map from the standard countable Markov shift Σ_A to corresponding generalized countable Markov shifts (spectrum of Exel-Laca algebras) X_A [1, 3], we can obtain explicit formulas for the spectral radius of weighted endomorphisms. The class of shifts includes the renewal shift is given by column finite and irreducible generalized countable Markov shifts for which the shift map is continuously extended.

The proof involves results from ergodic optimization and the existence of maximizing measures for standard countable Markov shifts. Our theorem generalizes previous results for the shifts with a finite number of symbols obtained by B. K. Kwaśniewski and A.V. Lebedev in [2]. This study was financed, in part, by the São Paulo Research Foundation (FAPESP), Brazil. Process Number 2016/25053-8.

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References

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