



Analysis Seminar

Growth Of Markov Factors, Smoothness Of Green's Functions And Their Relations

By

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Abstract: For a given compact set E in the complex plane, the n 'th Markov factor is the norm of the differentiation operator acting on the finite dimensional space of polynomials of degree at most n . The set E is said to admit Markov Property (MP) if the sequence of Markov factors follow a polynomial growth. On the other hand, the set E is said to admit Hölder Continuity Property (HCP), if the corresponding Green function is Hölder continuous.

It is well known that if $E \in \text{HCP}$ then $E \in \text{MP}$. The inverse implication has been an open problem for many years. In this talk, we will examine the results in the literature regarding the latter and see the recent partial results obtained by V. Andrievskii and V. Totik.

Date: Wednesday, December 6, 2023

Time: 13:45-14:45

Place: SA141 - Mathematics Seminar Room