ISTANBUL ANALYSIS SEMINARS

EXTREMAL PROPERTIES OF ORTHOGONAL POLYNOMIALS ON SEVERAL INTERVALS

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Abstract: Real polynomials which determine inverse polynomial images of an interval have many extremal properties including orthogonality with respect to the related equilibrium measure. Similar properties are satisfied for rational functions with fixed denominator.

We present several results in that direction, in particular a sharp Markov type inequality for rational functions with fixed poles (joint with Mehmet Ali Aktürk).

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