

Extremal properties of spectral measures

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Abstract

In this talk, we deal with extremal properties of spectral measures corresponding to selfadjoint extensions of a regular symmetric operator with deficiency indices $(1,1)$. To this end, a generalization of the moment problem is proposed. This generalization allows us to study point mass perturbations of extremal spectral measures. The results yield characterizations of spectral measures of differential operators similar to what is done for solutions of the classical moment problem.

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