

Realizations of extremal classes of Stieltjes and inverse Stieltjes functions

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We consider extremal classes of Stieltjes and inverse Stieltjes functions. It is shown that each function from the above mentioned classes can be realized as the impedance function of a singular L-system. Moreover, we establish the connection between the above mentioned classes and the Friedrichs and Krein-von Neumann boundary value problems. Applications to the inverse problems of singular L-systems with accretive Schrödinger operator are presented.

The talk is based on a joint work with E. Tsekanovskii.