

## ON A MEAN VALUE THEOREM IN THE CLASS OF HERGLOTZ FUNCTIONS AND ITS APPLICATIONS\*

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**Abstract.** Linear-fractional transformations of the pairs with  $J$ -property are considered. Extremal functions from an important subclass obtained in this way are expressed as mean values of extremal functions from another subclass of these linear-fractional transformations. Applications to some spectral and interpolation problems are discussed.

**Key words.** Linear-fractional transformation,  $J$ -property, Plus-condition, Mean value, Herglotz function, Extremal function, Spectral function.

**AMS subject classifications.** 15A99, 26E60, 30E05.

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