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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