ISTANBUL ANALYSIS SEMINARS

HARMONIC JANOWSKI CLOSE-TO-CONVEX FUNCTIONS

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Abstract: A harmonic function f on the open unit disc $\mathbb{D} = \{z \in \mathbb{C} \mid |z| < 1\}$ can be written as a sum of an analytic and an anti-analytic function as $f = h + \overline{g}$, where h and g are analytic in \mathbb{D} and are called the *analytic part* and the *co-analytic part* of f, respectively. Growth (the bounds of the modulus of a function) and distortion (the bounds of the modulus of the derivative of a function) theorems play an important rôle in the study of these functions, since such kind of results yield the compactness of the corresponding classes.

In this talk, growth and distortion theorems using the shearing construction method for harmonic Janowski close-to-convex functions will be considered.

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