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Section:

8. Analysis

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On a class of mappings harmonic in the half-plane, with a normalization at infinity

In the communication, a family of typically-real functions harmonic in the right half-plane will be presented. We consider the class of functions $F = h + \overline{g}$ harmonic in $\Pi^+ = \{z \in C : \Re z > 0\}$, such that:
1) $\Im F(z) = 0 \iff \Im z = 0, z \in \Pi^+$; 2) $\lim\limits_{\Pi^+ \ni z \to \infty} (F(z) - z) = a_F$;
3) $\lim\limits_{\Pi^+ \ni z \to \infty} \Re g(z) = \alpha_g$, $a_F, \alpha_g \in R$ ([2]).
The results are based, among others, on [1].

References: [1] Z. J. Jakubowski, A. Łazińska, *On typically-real functions ...*, Folia Sci. Univ. Techn. Resoviensis **129** (16) (1994), 5-24.
[2] Z. J. Jakubowski, A. Łazińska, *On a class of mappings harmonic ...*, Trudy Petrozavodskovo Gosudarstvennovo Univ. **4** (1997), 139-155.