On positive harmonic functions in constructive function theory

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This is a survey of some recent results concerning Bernstein-type inequalities for entire functions of the exponential tipe, harmonic majorants for classes of subharmonic functions, Phragmen-Lindelöf function, the Krein description of the Cartwrite classes of entire functions with the finite logarithmic integral, structure of the Martin boundary of the Denjoy domains, smoothness properties of the Green function, etc. The results are achieved by the application of methods and techniques of modern geometric function theory and potential theory. "Formal description" of the main result can be formulated as follows. Let Ω be a domain in the complex plane $\mathbb{C}$ whose complement $E = \overline{\mathbb{C}} \setminus \Omega$ is a subset of the real line (i.e. Ω is a Denjoy domain). If each point of E is regular for the Dirichlet problem in Ω, we provide a geometric description of the structure of E near infinity such that the Martin boundary of Ω has one or two "infinite" points.