

ON THE APPROXIMATION OF THE GENERALIZED CARATHEODORY FUNCTION

Lopushanskaya E. V.

The approximation problem of the generalized Nevanlinna function g in some area

$$W_\nu = \left\{ \alpha \in C_0, \left| \arg \alpha - \frac{\pi}{2} \right| \leq \nu \right\}, \text{ where } 0 \leq \nu < \frac{\pi}{2}$$

solved in the work of Krein M.G. and Langer H. "Übereinige Fortsetzungs probleme die eng mit der Theorie hermitescher Operatoren in Räume Π_χ zusammenhangen".

Generalized Caratheodory function is connected with generalized Nevanlinna function through Cayley–Neumann transformation. In this work, results about the approximation of the generalized Caratheodory function are submitted.