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Analytic Solutions of a Class of Linear and Nonlinear Functional Equations

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A functional analysis method is used to prove the existence and the uniqueness of solutions of a class of linear and nonlinear functional equations in the Hilbert space $H_2(\Delta)$ and the Banach space $H_1(\Delta)$. In the case of the nonlinear functional equation, a bound of the solution is also given. © 2001 Academic Press Key Words: analytic solutions; linear and nonlinear functional equations.