NUMBER OF ZERO SOLUTIONS OF SOME CANONICAL COMPLEX DIFFERENTIAL EQUATIONS OF THE SECOND ORDER WITH VARIABLE COEFFICIENT

Jelena Vujaković[1], Tanja Jovanović[1], Nataša Kontrec[1]

University of Priština, Faculty of Sciences and Mathematics
Lole Ribara 29, Kosovska Mitrovica, Serbia
jelena.vujakovic@pr.ac.rs ; tanja.jovanovic@pr.ac.rs; natasa.kontrec@pr.ac.rs

Abstract
By solving the frequency function equation only a small number of complex equations of the second order oscillations can be solved. The simplest way is to observe canonical complex differential equations with constant coefficient. In this paper we give an overview of eight cases of complex differential equations in which the coefficient is a polynomial or a variable coefficient
Keywords: a series iteration method, function of frequency, sine solution, cosine solution.