Solvability of a Class of Delay Differential Equations Using a Modified Power Series Method

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In this talk we present a Modified Power Series Method for the solvability of a class of delay differential equations arising in biology and engineering. Unlike the traditional power series method which is applied to solve only linear differential equations, this new approach is applicable to both linear and nonlinear problems. The method produces a system of algebraic equations which is solved to determine the coefficients in the trial solution. The method provides the solution in form of a rapid convergent series. The obtained results for numerical examples demonstrate the reliability and efficiency of the method.

References

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