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**B38: Application of Differential Transformation Method for Solving Maternally-Derive
-Immunity Susceptible Infected Recovered (MSIR) Model of a Measles Disease**

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Abstract

Differential Transformation Method (DTM) is a semi-analytical technique for solving linear and non-linear ordinary differential equations (ODEs). In this paper, we used this method to solve the MSIR model of the measles disease. The DTM solution was validated with Runge-Kutta 4-5th order in Maple software. The solution was also presented graphically.

Keywords: *differential equation; differential transformation method; semi-analytical*