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**FIFTH ORDER DIAGONALLY IMPLICIT RUNGE-KUTTA  
NYSTROM GENERAL METHOD WITH AN EXPLICIT FIRST  
STAGE FOR SOLVING SECOND ORDER IVPs.**

FUDZIAH ISMAIL

A singly diagonally implicit Runge-Kutta-Nystrom General (SDIRKNG) method of fifth order with an explicit first stage for the integration of second order IVPs is constructed. A standard set of test problems are solved using the method and comparisons are made when the same set of test problems are reduced to first order system and solved using existing Runge-Kutta method. Numerical results suggest the advantage of the new method.

DEPARTMENT OF MATHEMATICS, UNIVERSITI PUTRA MALAYSIA, 43400, SERDANG, SELANGOR,  
MALAYSIA

*E-mail address:* fudziah.i@yahoo.com.my