Title of Article: An a(α)-stable method for solving initial value problems of ordinary differential equations.

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Abstract: An A(α)-stable implicit one step hybrid method for the numerical approximation of solutions of initial value problems of general second order ordinary differential equations is proposed. The method is developed by interpolation and collocation of a power series approximate solution and implemented as simultaneous integrators via block method. The stability and convergence of the methods are determined. Numerical experiments are conducted on sample problems and the absolute error estimates of the results are presented.