



**IMPROVING HEUN'S METHOD FOR SOLVING NON LINEAR
AGE-STRUCTURED POPULATION EQUATIONS
WITH INFINITE LIFE SPAN**

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Abstract

We develop a modified Heun's method for solving nonlinear age structured population models with finite and infinite life span. Convergence of the scheme is proven, numerical experiments are given in order to demonstrate efficiency of the proposed algorithm.

Keywords and phrases: age structured population models, Heun's method, characteristic lines.