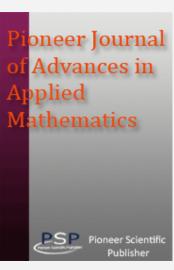# NUMERICAL APPROACH FOR SOLVING A MATHEMATICAL MODEL OF SAND DUNE FORMATION

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Abstract

In this paper, we are concerned with computation of Prigozhin one space dimension models for sand dune formation by using two numerical approaches. After established existence and uniqueness of the solution, the finite differences scheme and Tau-*t*chebychev expansions for this problem are investigated. A relevant test problem is considered and numerical results are presented.

Keywords and phrases: sand dune formation, numerical approach, finite differences scheme, Tau-*T*chebychev method.