MAE 6220

Homework 3

Due XXXXXXXXXXXXXXX

1. Examine the consistency of the following parabolic equation, using a central differencing scheme for discretization in space and a first order forward differencing scheme for discretization in time.

(Eq. 1)

1. Examine the stability of Eq.1 for the grid shown in Fig.1 using a central differencing scheme for discretization in space. The boundary conditions are and .

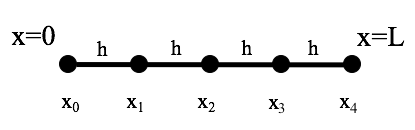


Fig. 1