ROTHE’S METHOD FOR NONLINEAR PARABOLIC
VARIATIONAL INEQUALITIES IN NONCYLINDRICAL DOMAINS

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Abstract. In this paper, a nonlinear parabolic variational inequality in noncylindrical domain is considered. Using extended Rothe’s method recently achieved in [11] an approximate solution is constructed. Existence and uniqueness results are proved. Also, we present some further results and comments related to the main result.


Keywords and phrases: Parabolic variational inequalities, parabolic PDE, numerical method, time-discretization, Rothe’s method.

REFERENCES