CONTINUOUS DEPENDENCE OF SOLUTIONS FOR A VISCOELASTIC PSEUDO–PARABOLIC EQUATION OF CARRIER TYPE

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Abstract. This paper explores an initial boundary value problem for a viscoelastic nonlinear pseudo-parabolic equation of Carrier type. The existence and uniqueness of solutions are established by the linear approximation and the Faedo-Galerkin method. Under appropriately sufficient conditions, the continuous dependence of solutions on the relaxation functions, and the nonlinear components in the problem are also studied.

Mathematics subject classification (2020): 30E25, 35L05, 35L60, 47J35, 65D20.
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