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Title. Global Existence and General Decay Estimates for Solutions of a Nonlinear Coupled Hyperbolic-Parabolic System

Abstract. This work is devoted to the study of a nonlinear system of coupled hyperbolic and parabolic equations. Initially, we establish the well-posedness of our system through the Faedo-Galerkin approach and derive its exponential stability by constructing a suitable Lyapunov functional in the non-degenerate case. Subsequently, we address the general stability in the degenerate case using integral inequalities.