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Global existence and energy decay of solutions to a Bresse system with delay terms

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Abstract: We consider the Bresse system in bounded domain with delay terms in the internal feedbacks and prove the global existence of its solutions in Sobolev spaces by means of semigroup theory under a condition between the weight of the delay terms in the feedbacks and the weight of the terms without delay. Furthermore, we study the asymptotic behavior of solutions using multiplier method.

Keywords: Bresse system; delay terms; decay rate; multiplier method

AMS Subject Classification: 35B40, 35L70

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