STABILITY OF THERMOELASTIC BRESSE SYSTEMS

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ABSTRACT. In this talk we consider linear thermoelastic Bresse systems with thermal effects given by Cattaneo or Fourier laws and acting on the longitudinal motion equation. We establish, for the Cattaneo case, that the exponential stability is characterized by a new stability condition. Moreover, for Bresse systems with thermal effects acting on the longitudinal and shear motion equations, we establish a new general characterization of exponential stability of solutions which generalizes the well know equal wave speed condition.

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