# STABILITY OF CAPTURE INTO PARAMETRIC AUTORESONANCE

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A mathematical model describing the initial stage of a capture into parametric autoresonance in nonlinear oscillating systems is considered. The resonance corresponds to solutions with unboundedly growing energy. The stability of such solutions with respect to persistent perturbations on an asymptotically large time interval is investigated. A class of admissible perturbations is described for which a capture into parametric autoresonance occurs.

Keywords: parametric resonance, nonlinear oscillations, perturbations, stability.

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