Dichotomies for Time-Varying Systems and Applications

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This talk will present a state-of-the-art survey for the concept of dichotomy for linear time-varying systems. In the qualitative theory of time-varying systems, the notion of dichotomy plays a vital role. For the deterministic case, uniform and non-uniform approaches for both invertible and non-invertible systems are presented. Also, for the stochastic systems, the problem of H_2 filtering in the case when Lyapunov operator is assumed to be dichotomic is presented.

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