

Balanced Reduction of Linear Periodic Systems.

Sauro Longhi; Giuseppe Orlando

Abstract: For linear periodic discrete-time systems the analysis of the model error introduced by a truncation on the balanced minimal realization is performed, and a bound for the infinity norm of the model error is introduced. The results represent an extension to the periodic systems of the well known results on the balanced truncation for time-invariant systems. The general case of periodically time-varying state-space dimension has been considered.

Keywords:

AMS Subject Classification: 93B;