

Number of Parameters of Anantharam's Model with Single-Input Single-Output Case

Authors : Kazuyoshi Mori

Abstract : In this paper, we consider the parametrization of Anantharam's model within the framework of the factorization approach. In the parametrization, we investigate the number of required parameters of Anantharam's model. We consider single-input single-output systems in this paper. By the investigation, we find three cases that are (1) there exist plants which require only one parameter and (2) two parameters, and (3) the number of parameters is at most three.

Keywords : linear systems, parametrization, coprime factorization, number of parameters

Conference Title : ICACTSS 2016 : International Conference on Automatic Control, Telecommunications, Signals and Systems

Conference Location : Amsterdam, Netherlands

Conference Dates : December 01-02, 2016