Journal of Computer and Systems Sciences International 2008 vol.47 N6, pages 841-850

Synthesis of input/output matrices for a multi-input multi-output dynamical system by given zeros of transfer matrix

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Abstract

The problem of synthesizing a linear multi-input multi-output dynamical system with equal numbers of inputs and outputs that has given transfer zeros is solved by applying the matrix canonization technique. Algorithms for constructing input and output matrices of the dynamical system model ensuring given location of transfer (system) zeros are proposed. © 2008 Pleiades Publishing, Ltd.

http://dx.doi.org/10.1134/S1064230708060014