

Decoupling in Singular Systems: a Polynomial Equation Approach

Leyla Gören; Müjde Güzelkaya

Abstract: In this paper, the row by row decoupling problem by static state feedback is studied for regularizable singular square systems. The problem is handled in matrix polynomial equation setting. The necessary and sufficient conditions on decouplability are introduced and an algorithm for calculation of feedback gains is presented. A structural interpretation is also given for decoupled systems.

Keywords:

AMS Subject Classification: