

CANONICAL STRUCTURES FOR PALINDROMIC MATRIX POLYNOMIALS

PETER LANCASTER, UWE PRELLS AND LEIBA RODMAN

Abstract. Spectral properties and canonical structures of palindromic matrix polynomials are studied in terms of their linearizations, standard triples, and unitary triples. These triples describe matrix polynomials via eigenvalues and Jordan chains. As an application of canonical structures and their properties, criteria are developed for stable boundedness of solutions of systems of linear differential equations with symmetries.

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