

H-polynomials: an application to Toeplitz pencils

Maria C.Gouveia

Coimbra University, Portugal

Abstract

The Toeplitz Pencil Conjecture, stated by W. Schmale and P.K. Sharma in [2] is proved. The singular Toeplitz pencil $T(x)$ is replaced by an equivalent von Neumann regular Hankel matrix over $C[x]$ and a generalization of Fiedler results [1] on quasidirect decomposition is applied.

Keywords

Toeplitz and Hankel matrices, Quasidirect decompositions, H-polynomials.

References

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