INVERTIBILITY OF TOEPLITZ OPERATORS WITH POLYANALYTIC SYMBOLS

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Abstract. For a class of continuous functions including complex polynomials in $z$ and $ar{z}$, we show that the corresponding Toeplitz operator on the Bergman space of the unit disk can be expressed as a quotient of certain differential operators with holomorphic coefficients. This enables us to obtain several nontrivial operator theoretic results about such Toeplitz operators, including a new criterion for invertibility of a Toeplitz operator for a class of harmonic symbols.

References

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