

Unbounded Toeplitz Operators in the Fock Space

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Abstract

The lectures will concern mostly various classes of unbounded Toeplitz operators in the Fock space over a finite dimensional Hilbert space H . There are two (or even more) natural definitions of unbounded Toeplitz operators in this case. Some spectral properties of them will be discussed. In particular extensions of the Newman-Shapiro Isometry Theorem will be proved. Two different approaches to definitions of Toeplitz operators will be given in the case of the Fock space over an infinite dimensional Hilbert space. Finally, a few open problems (posed mostly for the finite dimensional H) will be presented.