A SUBNORMAL TOEPLITZ COMPLETION

IN SUNG HWANG, AN HYUN KIM AND JONGRAK LEE

Abstract. In this paper we deal with a subnormal Toeplitz completion problem: Complete the unspecified Toeplitz operators of the partial block Toeplitz matrix

\[
G := \begin{bmatrix}
U^*p & ? \\
? & U^*q
\end{bmatrix}
\]

\( (p, q = 1, 2, \cdots) \)

to make \( G \) subnormal, where \( U \) is the shift on the Hardy space \( H^2(\mathbb{T}) \) of the unit circle \( \mathbb{T} \).


Keywords and phrases: Toeplitz operators, matrix-valued rational functions, Abrahamse’s Theorem, subnormal, hyponormal, completion.

REFERENCES