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CORRIGENDUM: "NORM LIMITS OF NILPOTENT OPERATORS AND WEIGHTED SPECTRA IN NON-SEPARABLE HILBERT SPACES"

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There is a mistake in the proof of *Theorem* 5 and its non-separable analog *Corollary* 8 of [1]. The author was unable to obtain fair proofs of these two results. However, the other results of the paper remain true, after a few minor modifications of their proofs.

Proof of Corollary 7. Replace the sentence "By ([1], Theorem 2.2), ... it can be obtained that $\Pi_{\aleph_0}(T_{\nu k,2}) = \Lambda(N_{\nu k})$." by the following:

By ([1], Theorem 2.2), there exist operators $T_{\nu k}' \in \mathcal{L}(\mathcal{H}_{\nu k})$ such that $T_{\nu k} - T_{\nu k}'$ is a compact operator of norm smaller than $\varepsilon/4$ and $\mathcal{H}_{\nu k}$ admits the decompositions $\mathcal{H}_{\nu k} = \mathcal{H}_{\nu k,1} \oplus \mathcal{H}_{\nu k,2}' \oplus \mathcal{H}_{\nu k,2}'' = \mathcal{H}_{\nu k,1} \oplus \mathcal{H}_{\nu k,2}$ with respect to which

$$T_{\nu k}' = \begin{pmatrix} N_{\nu k} & 0 & T_{\nu k,1} \\ 0 & N_{\nu k} & T_{\nu k,2}' \\ 0 & 0 & T_{\nu k,2}'' \end{pmatrix} = \begin{pmatrix} N_{\nu k} & T_{\nu k,1} \\ 0 & T_{\nu k,2} \end{pmatrix}$$

where $N_{\nu k}$ is a normal operator such that $\Lambda(N_{\nu k}) = E(N_{\nu k}) = \Pi_{\aleph_0}(T) = \Pi_{\aleph_0}(T_{\nu k,2})$, and

$$T_{\nu k,2} = \begin{pmatrix} N_{\nu k} & T_{\nu k,2}' \\ 0 & T_{\nu k,2}'' \end{pmatrix}$$

with respect to the decomposition $\mathcal{H}_{\nu k,2} = \mathcal{H}_{\nu k,2}' \oplus \mathcal{H}_{\nu k,2}''$.

Also, replace the last two sentences "Moreover, Theorem 5 ... for all λ." by:

Moreover, it is clear that, in this case, $T_{\nu k,2}$ is also bi-quasi-triangular and $E(T_{\nu k,2}) = E(N_{\nu k})$. Then, our previous arguments show that T' actually satisfies the condition (vi) too. In fact, ind$(\lambda-T_2)=0$ for all λ.

Finally, replace the section "*Sufficiency for the case* (ii)" by this new one:

Sufficiency for the case (ii). In this case the proof follows exactly as in the case (i). We only have to observe that if ind$(\lambda-A)=0$ for all complex λ and $\Lambda(A)$ and $\Lambda_\alpha(A)$, $\aleph_0 \leq \alpha \leq h$, are connected sets containing the origin, then the A' of (i') satisfies the following property: $\Lambda(N_j)=\Lambda_h(N_j)$ is connected and contains the origin. Hence, N_j (and a fortiori $N_j \oplus D_j$) can be uniformly approximated by nilpotent operators in $\mathcal{L}(\mathcal{H}_j)$, j=1,2,3,4, whence it follows exactly as in the *Proof* of (i') that A' $\in$ $\in \underset{\sim}{N}(\mathcal{H})^-$. Therefore, A also belongs to $\underset{\sim}{N}(\mathcal{H})^-$.

REFERENCES

[1] HERRERO D.A., *Norm limits of nilpotent operators and weighted spectra in non-separable Hilbert spaces*, Rev. Un. Mat. Argentina 27 (1975), p. 83-105.

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