

## Weyl Type Theorems for Restrictions of Bounded Linear Operators

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*Abstract:* In this paper we give sufficient conditions for which Weyl's theorems for a bounded linear operator  $T$ , acting on a Banach space  $X$ , can be reduced to the study of Weyl's theorems for some restriction of  $T$ .

*Key words:* Weyl's theorem,  $a$ -Weyl's theorem, semi-Fredholm operator, pole of the resolvent.

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### REFERENCES

- [1] P. AIENA, "Fredholm and Local Spectral Theory, with Application to Multipliers", Kluwer Academic Publishers, Dordrecht, 2004.
- [2] P. AIENA, Classes of operators satisfying  $a$ -Weyl's theorem *Studia Math.* **169** (2005), 105–122.
- [3] P. AIENA, E. APONTE, E. BALZAN, Weyl type theorems for left and right polaroid operators, *Integral Equations Operator Theory* **66** (2010), 1–20.
- [4] P. AIENA, M.T. BIONDI, C. CARPINTERO, On Drazin invertibility, *Proc. Amer. Math. Soc.* **136** (2008), 2839–2848.
- [5] P. AIENA, P. PEÑA, Variation on Weyl's theorem, *J. Math. Anal. Appl.* **324** (2006), 566–579.
- [6] M. AMOUCH, Weyl type theorems for operators satisfying the single-valued extension property, *J. Math. Anal. Appl.* **326** (2007), 1476–1484.
- [7] C. CARPINTERO, O. GARCÍA, E. ROSAS, J. SANABRIA, B-Browder spectra and localized SVEP, *Rend. Circ. Mat. Palermo (2)* **57** (2008), 241–255.
- [8] L.A. COBURN, Weyl's Theorem for nonnormal operators, *Michigan Math. J.* **13** (1966), 285–288.
- [9] R. CURTO, Y.M. HAN, Generalized Browder's and Weyl's theorems for Banach space operators, *J. Math. Anal. Appl.* **336** (2007), 1424–1442.

- [10] B.P. DUGGAL, Polaroid operators satisfying Weyl's theorem, *Linear Algebra Appl.* **414** (2006), 271–277.
- [11] J.K. FINCH, The single valued extension property on a Banach space, *Pacific J. Math.* **58** (1975), 61–69.
- [12] H. HEUSER, “Functional Analysis”, John Wiley & Sons, Chichester, 1982.
- [13] M. MBEKHTA, V. MÜLLER, On the axiomatic theory of the spectrum II, *Studia Math.* **119** (1996), 129–147.
- [14] J.P. LABROUSSE, Les opérateurs quasi Fredholm: une généralisation des opérateurs semi Fredholm, *Rend. Circ. Mat. Palermo (2)* **29** (1980), 161–258.
- [15] V. RAKOČEVIĆ, Operators obeying a-Weyl's theorem, *Rev. Roumaine Math. Pures Appl.* **34** (1989), 915–919.
- [16] H. ZGUITTI, A note on generalized Weyl's theorem, *J. Math. Anal. Appl.* **316** (2006), 373–381.