

ON JOINT SPECTRUM OF INFINITE DIRECT SUMS

SHUILIN JIN, QINGHUA JIANG, YADONG WANG AND GUANGREN DUAN

Abstract. For families of uniformly bounded n -tuples $T_k = (T_k^1, \dots, T_k^n)$, $k = 1, 2, \dots$ of commuting operators on \mathcal{H} , the joint spectrum of $\oplus_{k=1}^{\infty} T_k$ is considered.

Mathematics subject classification (2010): Primary 47A13.

Keywords and phrases: Joint spectrum, joint point spectrum.

REFERENCES

- [1] R. CURTO, *Fredholm and invertible n -tuples of operators*, Trans. Amer. Math. Soc. **266** (1981), 129–159.
- [2] R. CURTO AND K. YAN, *The Taylor spectrum of infinite direct sums*, Contemp. Math. **120** (1991), 19–27.
- [3] M. CHO AND M. TAKAGUCHI, *Joint spectra of matrices*, Sci. Rep. Hirosaki Univ. **26** (1979), 15–19.
- [4] J. PUSHPA AND S. M. PATEL, *On joint spectrum, joint numerical range and joint spectral radius*, Glasnik Mat. Ser. III **13** (1977), 315–321.
- [5] J. L. TAYLOR, *A joint spectrum for several commuting operators*, J. Funct. Anal. **6** (1970), 172–191.
- [6] J. L. TAYLOR, *The analytic functional calculus for several commuting operators*, Acta Math. **125** (1970), 1–38.