

HERMITIAN OPERATORS ON LIPSCHITZ FUNCTION SPACES

MOISÉS VILLEGAS-VALLECILLOS

UNIVERSITY OF CÁDIZ (SPAIN)

ABSTRACT. In 1961, G. Lumer [2] extended the notion of hermitian operator to general Banach spaces using semi-inner products.

Later, this theory developed by Lumer allowed R. Fleming and J. E. Jameson [1] to characterize hermitian operators on spaces $\mathcal{C}(X, E)$ of vector-valued continuous functions.

Following a similar scheme to that employed by Fleming and Jameson, we characterize bounded hermitian operators on spaces of vector-valued Lipschitz functions $\text{Lip}(X, E)$.

Joint work with Fernanda Botelho, James Jamison and Antonio Jiménez Vargas.

REFERENCES

- [1] R. FLEMING, J. E. JAMISON, Hermitian Operators on $C(X, E)$ and the Banach–Stone theorem, *Math. Z.* **170** (n 1), 77–84, 1980.
- [2] G. LUMER, Semi-inner product spaces, *Trans. American math. Soc.* **100**, 29–43, 1961.