

1. Record Nr.	UNISA996466541303316
Autore	Kadets Vladimir
Titolo	Spear Operators Between Banach Spaces [[electronic resource] /] / by Vladimir Kadets, Miguel Martín, Javier Merí, Antonio Pérez
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-71333-7
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XVII, 164 p. 5 illus.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 2205
Disciplina	515.724
Soggetti	Mathematical analysis Analysis (Mathematics) Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction -- 2. Spear Vectors and Spear Sets -- 3. Spearness, the aDP and Lushness -- 4. Some Examples in Classical Banach Spaces -- 5. Further Results -- 6. Isometric and Isomorphic Consequences -- 7. Lipschitz Spear Operators -- 8. Some Stability Results -- 9. Open Problems.
Sommario/riassunto	This monograph is devoted to the study of spear operators, that is, bounded linear operators G between Banach spaces X and Y satisfying that for every other bounded linear operator $T: X \rightarrow Y$ there exists a modulus-one scalar ω such that $\ G + \omega T\ = 1 + \ T\ $. This concept extends the properties of the identity operator in those Banach spaces having numerical index one. Many examples among classical spaces are provided, being one of them the Fourier transform on L_1 . The relationships with the Radon-Nikodým property, with Asplund spaces and with the duality, and some isometric and isomorphic consequences are provided. Finally, Lipschitz operators satisfying the Lipschitz version of the equation above are studied. The book could be of interest to young researchers and specialists in functional analysis, in particular to those interested in Banach spaces and their geometry. It is essentially self-contained and only basic knowledge of functional analysis is needed.

