LIPSCHITZ $\phi$-SUMMING OPERATORS

BELAALA MAATOUGUI

Abstract. Let $\phi: [0, \infty] \to [0, \infty]$ be a modulus function. We introduce the notion of Lipschitz $\phi$-summing operator between pointed metric spaces and give a nonlinear version of a Pietsch domination theorem for such operators.

Acknowledgments
The author wants to thank the anonymous referees for their careful reading and the big effort, they have made in order to provide many corrections, new proofs of some results. The author would like to thank professor Antonio Jimenez Vargas Universidad de Almeria, (spain) Department of Mathematics for his warm reception and valuable comments during the preparation of this paper.

References

Received 20 February 2017

University of M’sila, Laboratoire d’Analyse Fonctionnelle et Géométrie des Espaces, M’sila, 28000, Algeria.
E-mail address: belaala.maato@gmail.com

2010 Mathematics Subject Classification. Primary 46E15; Secondary 26A16, 47L20.
Key words and phrases. Lipschitz operator, Lipschitz $\phi$-summing operator, Pietsch domination theorem.