



Ann. Funct. Anal. 3 (2012), no. 1, 142–150

ANNALS OF FUNCTIONAL ANALYSIS

ISSN: 2008-8752 (electronic)

URL: www.emis.de/journals/AFA/

A NEW HALF-DISCRETE MULHOLLAND-TYPE INEQUALITY WITH PARAMETERS

BICHENG YANG

Communicated by J. Soria

ABSTRACT. By means of weight functions and Hadamard's inequality, a new half-discrete Mulholland-type inequality with a best constant factor is given. A best extension with parameters, some equivalent forms, the operator expressions as well as some particular cases are also considered.

DEPARTMENT OF MATHEMATICS, GUANGDONG UNIVERSITY OF AND EDUCATION, GUANGZHOU,
GUANGDONG 510303, P. R. CHINA.

E-mail address: bcyang@gdei.edu.cn

Date: Received: 6 December 2011; Accepted: 3 March 2012.

2010 Mathematics Subject Classification. Primary 26D15; Secondary 47A07.

Key words and phrases. Mulholland-type inequality, weight function, equivalent form.