

1125-VB-302

Shusen Ding, Seattle University, Seattle, WA 98112, **Guannan Shi*** (shign@hit.edu.cn), No.92 Westdazhi St. Nangang District, Harbin, 150001, Peoples Rep of China, and **Yuming Xing**, No.92 Westdazhi St. Nangang District, Harbin, 150001, Peoples Rep of China. *Higher integrability of iterated operators on differential forms.*

In this paper, we first prove the local higher integrability and higher order imbedding theorems for the iterated operators defined on differential forms. Then, we prove the global higher integrability and higher order imbedding inequalities for these operators. Finally, we demonstrate applications of the main results by examples. (Received August 26, 2016)