

Title: Compactness of Riemann–Stieltjes operators between F(p,q,s) spaces and $\alpha\text{-Bloch spaces}$

Author(s): Songxiao Li and Stevo Stević

Let H(B) denote the space of all holomorphic functions on the unit ball $B \subset \mathbb{C}^n$. In this paper we investigate the following integral operators

$$T_g(f)(z) = \int_0^1 f(tz) \Re g(tz) \frac{dt}{t} L_g(f)(z) = \int_0^1 \Re f(tz) g(tz) \frac{dt}{t}$$

 $f \in H(B), z \in B$, where $g \in H(B)$ and $\Re h(z) = \sum_{j=1}^{n} z_j \frac{h}{z_j}(z)$ is the radial derivative of h. The operator T_g can be considered as an extension of the Cesàro operator on the unit disk. The compactness of the operators T_g and L_g between the general function space F(p, q, s), which includes the Hardy space, Bergman space, Bloch space, and Q_p space, and the α -Bloch space are discussed.

Address:

Songxiao Li Department of Mathematics Shantou University 515063, Shantou, GuangDong China and Department of Mathematics JiaYing University 514015, Meizhou, GuangDong China E-mail: jyulsx@163.com, lsx@mail.zjxu.edu.cn Address: Stevo Stević Mathematical Institute of the Serbian Academy of Science Knez Mihailova 35/I 11000 Beograd Serbia *E-mail:* sstevic@ptt.yu, sstevo@matf.bg.ac.yu