

## On complete convergence for arrays of rowwise independent random elements in Banach spaces

Hu T., Szynal D., Rosalsky A., Volodin A.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

### Abstract

We extend and generalize some recent results on complete convergence (cf. Hu, Moricz, and Taylor [14], Gut [11], Wang, Bhaskara Rao, and Yang [26], Kuczmaszewska and Szynal [17], and Sung [23]) for arrays of rowwise independent Banach space valued random elements. In the main result, no assumptions are made concerning the existence of expected values or absolute moments of the random elements and no assumptions are made concerning the geometry of the underlying Banach space. Some well-known results from the literature are obtained easily as corollaries. The corresponding convergence rates are also established.

---