

---



---

**ERRATA**

---



---

**Erratum to: “On  $n$ -Term Approximations with Respect to Frames Bounded in  $L^p(0, 1)$ ,  $2 < p < \infty$ ”**  
**[*Mathematical Notes* 95 (5–6), 775–779 (2014)]**

**B. S. Kashin<sup>1\*</sup> and A. V. Meleshkina<sup>2\*\*</sup>**

<sup>1</sup>*Steklov Mathematical Institute of Russian Academy of Sciences, Moscow, Russia*

<sup>2</sup>*Lomonosov Moscow State University, Moscow, Russia*

Received November 10, 2016

**DOI:** 10.1134/S0001434617030348

In the text of our paper, it is necessary to insert a correction, which does not affect the results given in the paper (the authors wish to thank Yu. V. Malykhin, who pointed out the inaccuracy). The text after formula (14) and up to formula (15) inclusive must be revised as follows:

“and  $U_{\beta_k}$  is a Walsh orthogonal matrix of order  $\beta_k$  whose entries satisfy the equality

$$|(U_{\beta_k})_{rs}| = \beta_k^{-1/2}, \quad 1 \leq r, \quad s \leq \beta_k.$$

For brevity, we introduce the notation  $u_k = U_{\beta_k}$ ,  $k = 2, 3, \dots$ . Let us define the sequence of natural numbers  $s_k^i$ ,  $k = 2, 3, \dots$ ,  $i = 1, 2, \dots, 2^k - 1$ , as follows:

$$s_2^1 = 1, \quad s_k^i + \beta_k - 1 = s_k^{i+1}, \quad i = 1, 2, \dots, 2^k - 2, \quad s_k^{2^k-1} + \beta_k - 1 = s_{k+1}^1.$$

Let us now construct the required complete (in  $L^2(0, 1)$ ) orthonormal system  $\Psi$ . To each of the  $\tilde{\chi}_k^i$ , except the last of the bundles, we add  $\beta_k - 1$  functions  $w_j$  and transform them using the Walsh matrix. The elements of  $\Psi$  are numbered by three indices  $k, i, \nu$ , setting

$$\begin{cases} \psi_k^{i,1} = \chi_k^i & \text{for } k = 0, 1, 1 \leq i \leq 2^k, \\ \psi_k^{i,\nu} = (u_k)_{\nu,1} \cdot \tilde{\chi}_k^i + \sum_{\mu=2}^{\beta_k} (u_k)_{\nu,\mu} \cdot w_{s_k^i + \mu - 1} & \text{for } k = 2, 3, \dots, 1 \leq i \leq 2^k - 1, \nu = 1, \dots, \beta_k. \end{cases} \quad (15)$$

---

\*E-mail: kashin@mi.ras.ru

\*\*E-mail: meleshkina-anna@mail.ru