

$$P\left(\left\|\sum_{i=1}^n v_i Y_i\right\| > M + t\|(v_i)\|_{\mathcal{N},u}^w\right) \leq 2e^{-tu/72}.$$

Therefore integrating by parts gives

$$\begin{aligned} \left\|\sum_{i=1}^n v_i Y_i\right\|_p &\leq M + 2\|(v_i)\|_{\mathcal{N},p}^w + \|(v_i)\|_{\mathcal{N},p}^w \\ &\times \left(\int_0^\infty pt^{p-1} P\left(\left\|\sum_{i=1}^n v_i Y_i\right\| > M + (2+t)\|(v_i)\|_{\mathcal{N},p}^w\right) dt\right)^{1/p} \\ &\leq M + \|(v_i)\|_{\mathcal{N},p}^w \left(2 + \left(\int_0^\infty 2pt^{p-1} e^{-tp/72} dt\right)^{1/p}\right) \\ &= M + \|(v_i)\|_{\mathcal{N},p}^w \left(2 + 72\left(2\frac{\Gamma(p+1)}{p^p}\right)^{1/p}\right) \leq M + 74\|(v_i)\|_{\mathcal{N},p}^w. \end{aligned}$$

Since $M \leq 2\|\sum_{i=1}^n v_i Y_i\|_1$ the proof of inequality (1) is now complete.

Theorem 1 and the Paley-Zygmund inequalities as in [1] and [2] yield

COROLLARY 1. *There exist universal constants $0 < c < C < \infty$ such that under the assumptions of Theorem 1, for each $t > 0$,*

$$P(\|X\| > C(\|X\|_1 + \|(v_i)\|_{\mathcal{N},t}^w)) \leq e^{-t},$$

$$P(\|X\| > c(\|X\|_1 + \|(v_i)\|_{\mathcal{N},t}^w)) \geq \min(c, e^{-t}).$$

References

- [1] S. J. Dilworth and S. J. Montgomery-Smith, *The distribution of vector-valued Rademacher series*, Ann. Probab. 21 (1993), 2046–2052.
- [2] E. D. Gluskin and S. Kwapien, *Tail and moment estimates for sums of independent random variables with logarithmically concave tails*, Studia Math. 114 (1995), 303–309.
- [3] P. Hitczenko and S. Kwapien, *On the Rademacher series*, in: Probability in Banach Spaces 9, Birkhäuser, Boston, 31–36.
- [4] B. Maurey, *Some deviation inequalities*, Geom. Funct. Anal. 1 (1991), 188–197.
- [5] M. Talagrand, *A new isoperimetric inequality and the concentration of measure phenomenon*, in: Israel Seminar (GAFA), Lecture Notes in Math. 1469, Springer, 1991, 94–124.

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(3568)

Correction to “An index formula for chains” (Studia Math. 116 (1995), 283–294)

by

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In the proof of Theorem 9 the formula (9.3),

$$\begin{aligned} \begin{pmatrix} a \\ b \end{pmatrix} &= \begin{pmatrix} a \\ b \end{pmatrix} \begin{pmatrix} a' & b' \end{pmatrix} \begin{pmatrix} a \\ b \end{pmatrix}, \\ \begin{pmatrix} -b & a \end{pmatrix} &= \begin{pmatrix} -b & a \end{pmatrix} \begin{pmatrix} -b'' & a'' \end{pmatrix} \begin{pmatrix} -b & a \end{pmatrix}, \end{aligned}$$

should read

$$\begin{aligned} \begin{pmatrix} a \\ b \end{pmatrix} &= \begin{pmatrix} a \\ b \end{pmatrix} \begin{pmatrix} a' & (1-a'a)b' \end{pmatrix} \begin{pmatrix} a \\ b \end{pmatrix}, \\ \begin{pmatrix} -b & a \end{pmatrix} &= \begin{pmatrix} -b & a \end{pmatrix} \begin{pmatrix} -b'' & a'' \\ a''(1-bb'') \end{pmatrix} \begin{pmatrix} -b & a \end{pmatrix}. \end{aligned}$$

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