Errata for “Measurability in a Banach space” **G. A. Edgar**

Page 664 Line 17. Replace cl_w **by** cl_{w}
Page 664 Line 18. Replace cl_w **by** cl_{w}
Page 665 Line 4. Replace eaxmple **by** example
Page 668 Line 2. Replace [22] **by** [2]
Page 668 Line 5. Replace [22, Lemma 9] **by** [2, Lemma 9]
Page 668 Line 6. Replace *2 1* **by** ***2.1***
Page 668 Line 20. Replace *Baire* **by** Baire
Page 670 Line -14. Replace τ-smooth **by** *τ-smooth*
Page 672 Line 14. Replace countable **by** uncountable
Page 673 Line 2,3. Replace *weak* **by** weak **(three times)**
Page 673 Line 6. Replace *ba* **by** *be*
Page 677 Line 11. Replace *in* **by** In:

Other remarks

1.3: YES, Talagrand & Fremlin.

1.4: In fact, the identity is universally Luzin measurable in both directions.

1.5: Same.

1.5: See also: Lemma 2.6 of J. Hoffmann-Jorgensen, The strong law of large numbers and the central limit theorem in Banach spaces. [Proceedings of the Seminar on Random Series, Convex Sets and Geometry of Banach Spaces (Mat. Inst., Aarhus Univ., Aarhus, 1974; dedicated to the memory of E. Asplund), pp. 74–99.]

1.4, 1.5: See Theorem 1 of V. I. Rybakov, Some properties of measures on a normed space that has the RN property. (Russian) *Mat. Zametki* **21** (1977), 81–92.

1.5, 1.7: See R. D. Bourgin’s book, 4.3.11.

1.6: Fremlin says Lemma 1.6 surely holds for K-analytic.

1.7: Also: If $\mathrm{Borel}(X^*, \mathrm{norm}) \subseteq \mathrm{Univ}(X^*, \mathrm{weak}^*)$.

1.7: See Saab.

2.1 and Bockstein: Theorem 4 of Ross & Stone, Products of measure spaces. *Amer. Math. Monthly* **71** (1964) 398–403.

2.1: See Engelking, On functions defined on cartesian products. *Fund. Math.* **59** (1966) 221–231. Also A. W. Hagen, Approximation of real continuous functions on Lindelof space. *Proc. Amer. Math. Soc.* **22** (1969). It follows that: If every countable sub-product is Lindelof, then $\mathrm{Baire}(\prod X_i) = \prod \mathrm{Baire}(X_i)$.

5.2: Tortrat’s result actually says a measure on $\mathrm{Baire}(X, \mathrm{weak})$ must have separable support. Hence we can avoid Grothendieck here. Grothendieck is a corollary of Tortrat. Similarly for 1.4 use Tortrat.

J. Uhl, Vector valued functions equivalent to measurable functions. *Proc. Amer. Math. Soc.* **68** (1978) 32–36.

Odell & Rosenthal, A double-dual characterization of separable Banach spaces containing l^1. *Israel J. Math.* **20** (1975), 375–384. l_1 does not embed in X if and only if $\mathrm{Baire}(X^*, \mathrm{weak}^*) = \mathrm{Baire}(X^*, \mathrm{weak})$.

Hayden: Even if X is nonseparable, l_1 does not embed in $X \iff \mathrm{Baire}(X^*, \mathrm{weak}) \subseteq \mathrm{Univ}(X^*, \mathrm{weak}^*)$.

Typeset by $\mathcal{A}\mathcal{M}\mathcal{S}$-TEX

Dubins & Freedman, Measurable sets of measures. *Pacific J. Math.* **14** (1964) 1211–1222. $\mu \mapsto \mu(A)$ measurable for all A; countably generated case.

A. Janssen, Messbare Mengen von Massen und Inhalten. *Man. Math.* **34** (1981) 1–15. Baire is the σ-algebra generated by the maps $\mu \mapsto \mu(A)$.

Rybakov (cited above), Theorem 4: l^1 does not embed in X if and only if every vector measure in X' has relatively compact range. Theorem 5: the Schwartz theorem plus mine (Theorems 1.5, 1.7).

Theorem 2.3 can be used to prove two results in Goldman & Talagrand, *Math. Scand.* **44** (1979) 345–356. See Remarque, p. 348.

Noble & Ulmer, Factoring functions on Cartesian products. *Trans. Amer. Math. Soc.* **163** (1972) 329–339. Depends on countably many coordinates $\Longleftrightarrow$ pseudo-$\aleph_1$-compact.

1.5 used in: R. Alencar, Multilinear mappings of nuclear and integral type. *Proc. Amer. Math. Soc.* **94** (1985) 33–38.

J. de Maria, The space l_∞/c_0 is not a Radon space. *Proc. Amer. Math. Soc.* **112** (1991) 1095–1100.

A. Bozorgnia & M. Bhaskara Rao, Measurability and convergence theorems for random elements in Banach spaces in terms of total subsets of linear functionals. *Bull. Inst. Math. Acad. Sinica* **14** (1986) 383–416. Summarizes different kinds of measurability and convergence.