

## List of symbols

$\mathbb{N}$	the set $\{1, 2, \dots\}$ of all natural numbers
$\mathbb{N}_0$	the set $\{0, 1, 2, \dots\}$ of all non-negative integers
$\mathbb{Z}$	the set of all integers
$\mathbb{Q}$	the set of all rationals
$\mathbb{R}$	the set of all reals
$\mathbb{C}$	the set of all complex numbers
$B_X$	the unit ball of a normed space $X$ , $B_X = \{x \in X : \ x\  \leq 1\}$
$S_X$	the unit sphere of a normed space $X$ , $S_X = \{x \in X : \ x\  = 1\}$
$X^*$	the dual of a normed space $X$
$ A $	the cardinality of a set $A$
$\mathbb{1}_A$	the characteristic function of a set $A$
$I_X$	the identity operator acting on a Banach space $X$
$\omega$	the first infinite ordinal number
$[n]$	the set $\{1, 2, \dots, n\}$
$\mathcal{P}\Gamma$	the family of all subsets of a given set $\Gamma$
$\mathcal{P}_\infty\Gamma$	the family of all infinite subsets of a given set $\Gamma$
$\mathcal{F}_n\Gamma$	the family of all $n$ -element subsets of $\Gamma$
$\mathcal{F}\Gamma$	the family of all finite subsets of $\Gamma$
$\Pi(\Gamma)$	the family of all partitions of $\Gamma$
$\overline{A}$	the closure of $A$ in the norm topology
$\overline{A}^w$	the closure of $A$ in the weak topology
$\overline{A}^{w*}$	the closure of $A$ in the weak* topology
$\text{span}(A)$	the linear space generated by a set $A$
$\overline{\text{span}}(A)$	the norm closure of $\text{span}(A)$
$\overline{\text{span}}^{w*}(A)$	the closure of $\text{span}(A)$ in the weak* topology
$\text{conv}(A)$	the convex hull of a set $A$
$\overline{\text{conv}}(A)$	the norm closure of $\text{conv}(A)$
$\text{dist}(x, A)$	the distance between a point $x$ and a set $A$
$e_n$	the $n$ th canonical unit vector in a sequence space (unless otherwise stated)
$e_n^*$	the $n$ th coordinate functional on a sequence space (unless otherwise stated)
$X \oplus Y$	the direct sum of Banach spaces $X$ and $Y$ , equipped with any norm which is equivalent to $\ (x, y)\ _\infty := \max\{\ x\ , \ y\ \}$
$c_0(\Gamma)$	the Banach space of all scalar functions $x$ defined on $\Gamma$ such that for every $\varepsilon > 0$ there is a finite set $F \subset \Gamma$ with $ x(\gamma)  < \varepsilon$ for each $\gamma \in \Gamma \setminus F$ , equipped with the supremum norm
$\ell_p(\Gamma)$	for $p \in [1, \infty)$ , the Banach space of all scalar functions $x$ defined on $\Gamma$ such that $\ x\ _p := (\sum_{\gamma \in \Gamma}  x(\gamma) ^p)^{1/p} < \infty$ , equipped with the norm $\ \cdot\ _p$
$\ell_\infty(\Gamma)$	the Banach space of all scalar bounded functions defined on $\Gamma$ , equipped with the supremum norm $\ x\ _\infty := \sup\{ x(\gamma)  : \gamma \in \Gamma\}$
<i>operator</i>	= bounded and linear operator (unless otherwise stated)
<i>isomorphism</i>	= bounded, linear and bijective operator between Banach spaces
<i>functional</i>	= continuous, linear functional (unless otherwise stated)
<i>isometry</i>	= linear isometry (unless otherwise stated)
<i>embedding</i>	= bounded, injective, linear operator with a closed range
<i>subspace</i>	= closed, linear subspace (unless we talk about a dense subspace)