Index

Notation

$\mathbb{R} = (-\infty, \infty)$ and $\mathbb{R}_+ = [0, \infty)$
$\mathbb{Z} = \{\dots, -1, 0, 1, \dots\}$ and $\mathbb{Z}_+ = \{0, 1, \dots\}$
$X \stackrel{D}{=} Y = X$ and Y have the same distribution
$a := b = a$ is defined to be b
$f \equiv g =$ for all x it holds that $f(x) = g(x)$
$1_A =$ the indicator function of the set A
$\#A =$ the number of elements in the set A
$a \vee b, a \wedge b =$ maximum and minimum of a and b
$a^+, a^- = a \vee 0$ and $-a \wedge 0$
$[x] = \inf\{n \in \mathbb{Z} : n \leqslant x\} =$ integer part of x
$x \bmod h = x - [x/h]h =$ the remainder when x is divided by h
$f(x-) = \lim_{y \uparrow x} f(y) =$ left-hand limit
$\mu \wedge \lambda =$ the greatest common component of the measures μ and λ
$(\mu - \lambda)^+, (\mu - \lambda)^- =$ positive and negative parts of $\mu - \lambda$
$\mu \perp \lambda =$ the measures μ and λ are mutually singular
$\mu|_{\mathcal{A}} =$ restriction of the measure μ to the sub-σ-algebra $\mathcal{A}$
$\stackrel{D}{\to} =$ convergence in distribution
$\stackrel{tv}{\to} =$ convergence in total variation
$\|\cdot\| =$ the total variation norm
dot-convention: $f(\cdot) = f =$ the function with value $f(x)$ at x, for all x
$\sigma(\cdot) =$ the σ-algebra generated by $\cdot$
i.i.d. = independent and identically distributed