

NOTATION INDEX

$ A $ , 21	$B(D, s)$ , 92
$A^O$ , 47	$B(C, \rho)$ , 93
$A^C$ , 47	$B^O \equiv (B^O(t))_{t \in [0, 1]}$ , 101
$\alpha_n \equiv (\alpha_n(t))_{t \in [0, 1]}$ , 100	$B_b(S, \rho)$ , $B(S, \rho)(S \equiv D_O(C, \mu))$ , 107
$\varepsilon^A$ , 135	${}_C^1$ , 2
$B_k$ , $k \geq 1$ , ( $B_1 \equiv B$ ), 1	$C\bar{B}$ , 4
$B_C \equiv \bigotimes_C B$ , 2	$co(F)$ , 38
$\beta_n \equiv (\beta_n(C))_{C \in C}$ , 8	$C^b(S)$ , 42
$B_A$ , 14	$C_a^b(S)$ , 42
$B_k$ , 16	$C_b^b(S)$ , 42
$B^C(x, \delta_o)$ , 16	$C^{nf}$ , 52
$B_b(S) \equiv B_b(S, d)$ , 41	$C \equiv C[0, 1]$ , 93
$B(S)$ , 41	$C_q$ , 148
$B_d(x, r)$ , $B(x, r)$ , 41	$D_n(C, \mu)$ , 9
$B^O(x_i, r)$ , 67	$D_n^F$ , 12
$B(D, \rho)$ , 91	$D_n^F(q)$ , 17

- |                              |                                                               |
|------------------------------|---------------------------------------------------------------|
| $D_n^F(q)$ , 18              | $F^{-1}(s)$ , 12                                              |
| $D_n(q)$ , 18                | $F_a(s)$ , 42                                                 |
| $\Delta^C(F)$ , 21           | $F_b(s)$ , 42                                                 |
| $\overline{D}_{n,n}(C)$ , 28 | $F(s)$ , 47                                                   |
| $D(f)$ , 43                  | $F^\varepsilon$ , 50                                          |
| $d(\cdot, s_o)$ , 43         | $\ f\  := \sup_{x \in S}  f(x) $ , 59                         |
| $\partial A$ , 47            | $\overline{G}_\mu \equiv (\overline{G}_\mu(C))_{C \in C}$ , 2 |
| $d(\xi_n, n_n)$ , 65         | $G(s)$ , 47                                                   |
| $d := \max(d', d'')$ , 70    | $g^{-1}(B')$ , 54                                             |
| $\text{diam}(A)$ , 83        | $\mathbb{E}_\mu \frac{L}{f.d.} \overline{G}_\mu$ , 111        |
| $D \equiv D[0,1]$ , 90       | $\int_*^* f \, d\mu$ , 43                                     |
| $d_\mu$ , 106                | $\int_* f \, d\mu$ , 43                                       |
| $D_o(C, \mu)$ , 106          | $J_k$ , 108                                                   |
| $D_q$ , 148                  | $K(s)$ , 43                                                   |
| $\epsilon_x(B)$ , 1          | $\xi_n \xrightarrow{\quad L_b \quad} \xi$ , 65                |
| $E \equiv E((g_n), g)$ , 56  | $(\xi_n, n_n) \xrightarrow{\quad L_b \quad} (\xi, n)$ , 71    |
| $(E_o):$ , 111               | $\xi_n \xrightarrow{\quad L \quad} \xi$ (in $(D, s)$ ), 93    |
| $(E_1):$ , 112               | $\xi_n \xrightarrow{\quad L \quad} \xi$ , 95                  |
| $e_\mu$ , 161                | $K_n(s, t)$ , 140                                             |
| $F_n, F_n(t)$ , 12           | $K(s, t)$ , 143                                               |

- $L\{\xi\}$ , 1  
 $v_\alpha \equiv \mu_\alpha \circ g^{-1}$ , 54  
 $\frac{L}{=}$ , 4  
 $N(\varepsilon, C, \mu)$ , 111  
 $\ell^\infty(C)$ , 107  
 $N_I(\varepsilon, C, \mu)$ , 112  
 $\mu \equiv L\{\xi\}$ , 1  
 $v_n(t)$ , 140  
 $\mu_n$ , 1  
 $v_n(s, t]$ , 141  
 $\mu_n(B)$ ,  $\mu_n(B, \omega)$ ,  $\mu_n(\cdot, \omega)$ , 1  
 $N_I(\varepsilon, F, \mu)$ , 162  
 $\|\mu_n - \mu\|$ , 9  
 $P(x)$ , 21  
 $m^C(r)$ , 22  
 $\mathbb{P}^*$ , 65  
 $M_a(S)$ , 43  
 $\pi'$ , 73  
 $M_b(S)$ , 43  
 $\pi_t$ , 91  
 $\mu_*(A)$ , 43  
 $\pi_{t_1, \dots, t_k}(D)$ , 95  
 $\mu^*(A)$ , 43  
 $\pi_C$ , 107  
 $\tilde{\mu}$ , 44  
 $\pi_{c_1, \dots, c_k}(S_o)$ , 110  
 $\mu_\alpha \xrightarrow{b} \mu$ , 46  
 $Q$ , 12  
 $M_a^1(S)$ , 58  
 $Q_1$ , 19  
 $M_b^1(S)$ , 58  
 $Q_2$ , 147  
 $(M)_:$ , 107  
 $\mathbb{R}^k$ ,  $k \geq 1$ ,  $(\mathbb{R}^1 \equiv \mathbb{R})$ , 1  
 $(M_o)_:$ , 131  
 $R_{\tilde{\mu}}$ , 65  
 $(M_1)_:$ , 132  
 $\rho = \text{supremum metric}$ , 90  
 $N_n(B)$ , 3  
 $\rho_q$ , 148

$S = (S, d)$ , 42 $W$ , 143 $\sigma(\{d(\cdot, x) : x \in S\})$ , 43 $(X, \mathcal{B})$ , 1 $S_o^\delta$ , 43 $\|x\| := \sup_{t \in [0,1]} |x(t)| \quad (x \in D[0,1])$ , 95 $S_o^c$ , 43 $\sigma(\{\pi_t : t \in [0,1]\})$ , 91USED ABBREVIATIONS: $s$  = Skorokhod metric, 92ad( $\cdot$ ): = as to the proof of ( $\cdot$ ):

(SE):, 108

a.e. = almost everywhere

 $U_n$ ,  $U_n(t)$ , 18

CLT = Central Limit Theorem

 $U^b(S)$ , 42

df = distribution function

 $U_a^b(S)$ , 42

fidis = finite dimensional distributions

 $U_b^b(S)$ , 42

GCC = Glivenko-Cantelli class

 $U^b(C, d\mu)$ , 106 $\xrightarrow{L^1}$  = convergence in the mean $V(C)$ , 22 $\xrightarrow{\mathbb{P}}$  = convergence in probability $w_x(B)$ , 96 $\mathbb{P}$ -a.s. =  $\mathbb{P}$ -almost surely $w_x''(\delta)$ , 96rest<sub>A</sub>f = restriction of f on A $w_x''([t, t+\delta])$ , 97

r.h.s. = right hand side

 $w_x(\delta)$ , 101

SLLN = Strong Law of Large Numbers

 $w_\varphi(\delta)$ , 113

w.r.t. = with respect to

 $w_\varphi^\mathcal{V}(\delta)$ , 115

VCC = Vapnik-Chervonenkis class

 $W_n \equiv (W_n(t))_{t \in [0,1]}$ , 140