

SUBJECT INDEX

- analytic generator, 77

- Bernstein-type inequality, 8, 9
- Borel extension $\tilde{\mu}$ of a separable measure μ on $\mathcal{B}_d(S)$, 44
- Brownian bridge, 101

- canonical model, 15
- characterization theorem for μ -Donsker classes, 113
- Chernoff-type estimates of the mode, 15
- compactness, 58
- compact net in $M_a^1(S)$, 63
- continuous mapping theorems, 54
- convergence in law (L_d -convergence, 65; L -convergence, 93)
- convergence theorem for reversed submartingales, 10
- Cramér-type result, 65

- Devroye-Inequality, 34
- distribution-free statistic, 18
- Donsker classes of functions, 159, 162
- Donsker's functional CLT for the uniform empirical process, 101
- d-strictly separated, 77
- δ -tight, 58
- δ -tight w.r.t. S_\circ , 76

- empirical C -discrepancy, 9
- empirical C -process, 8, 106

empirical distribution function (empirical df), 12
 empirical \mathcal{F} -process, 160
 empirical measure, 1
 existence of a version of $\bar{\mathbb{G}}_\mu \equiv (\bar{\mathbb{G}}_\mu(C))_{C \in \mathcal{C}}$ in $S_0 \equiv \mathcal{U}^{\mathcal{D}}(C, d_\mu)$, 110, 111, 114
 finite dimensional distributions (fidis), 95, 110
 functional CLT's for empirical C -processes, 105
 functional CLT's for weighted empirical processes, 139
 functional CLT's for weighted empirical processes w.r.t. ρ_q -metrics, 150
 functional laws of the iterated logarithm, 158
 Gaussian process, 2, 110, 143, 151, 160
 Glivenko-Cantelli class (GCC), 36, 39, 137
 Glivenko-Cantelli convergence, 13, 15, 18
 Glivenko-Cantelli theorem, 12, 15, 21
 growth function pertaining to C , 22
 identification of limits, 52
 L -convergence, 93
 $L_{\mathcal{D}}$ -convergence, 65
 lower left orthants in $X = \mathbb{R}^k$, 2, 108, 129, 159
 Markov property of empirical measures, 3
 martingale property of empirical measures, 6
 martingale property of the weighted empirical process, 152
 measurability, 107, 131
 metric entropy, 111
 metric entropy with inclusion, 112
 μ -Donsker class, 113
 μ -Donsker class of functions 162
 Poissonization, 7

Portmanteau-theorem, 47

product spaces, 69

p-space, 1

quantile transformation, 12

Radon's theorem, 38

random change of time, 102

random element in X , 1

randomized discrepancy, 10

relatively L -sequentially compact, 95

relatively L_b -sequentially compact, 95

reversed martingale, 9

reversed submartingale, 9, 10

ρ_q -metric, 148

scores, 140

separable measures on $\mathcal{B}_b(S)$, 44

separation property, 38

sequential compactness, 74

shattered by \mathcal{C} , 22

Skorokhod-Dudley-Wichura Representation Theorem, 82

Skorokhod metric s , 92

smoothed version of empirical processes, 138

special versions, 12, 17

Strassen log log class, 159

strong approximation, 164

supremum metric ρ , 90, 106

tight measures on $\mathcal{B}_b(S)$, 45

trace σ -algebra, 14

uniform empirical process, 100

Vapnik-Chervonenkis class (VCC), 22

Vapnik-Chervonenkis-Inequalities, 27, 34

Vapnik-Chervonenkis-Lemma, 24

version, 111

weak convergence and mappings, 53

weak convergence criteria, 58

weak convergence of random elements in $D \equiv D[0,1]$ w.r.t. ρ_q -metrics, 147

weighted discrepancy, 17

weighted empirical process, 140

weight function, 17

