

Keywords index

Volume 7, 2020

- σ -martingale – 135
anomalous diffusion – 97
approximation – 191
averaging principle – 449
backward stochastic differential equation – 415
beta random variable – 97
branching process – 357
change of measures – 43
complete market – 379
compound Poisson process of order k – 395
compound renewal process – 43
conditional processes – 17
confidence ellipsoid – 435
confidence interval – 203
consistent estimator of best prediction – 203
constant dividend strategy – 245
de Vylder approximation – 245
distribution of supremum of solution – 79
entropy methods – 79
ergodic process – 339
Euler–Poisson–Darboux equation – 97
exponential functional – 291
extinction – 1
extinction probability – 357
extreme values – 61
filtration – 135
finite mixture model – 435
forward rate – 113
Fourier transform – 97
fractional Brownian motion – 191, 339
game options – 379
Gauss hypergeometric – 357
Gaussian Volterra process – 415
global solution – 1
harmonizable processes – 79
higher-order dispersive equations – 79
Hölder regularity – 449
infinite divisibility – 267
irregular barrier – 157
Itô formula – 415
Kolmogorov-type equation – 291
Lagrange inversion – 357
Lambert-W functions – 357
large deviations – 17
Lévy process – 113
local martingale – 135

- Malliavin calculus – 415
- market-consistent calibration – 113
- martingale – 43, 191
- martingale characterization – 395
- martingale measures – 43
- Mertens decomposition – 157
- mild solution – 449
- mixture of tempered stable
 - subordinators – 395
- mixture with varying concentrations – 435
- Monte Carlo method – 245
- multi-factor model – 113
- multivariate errors-in-variables model – 203
- net profit condition – 245
- nonlinear diffusion equation – 97
- nonlinear regression – 435
- nonpersistence in the mean – 1
- option pricing – 113
- ordinary least squares – 203
- Ornstein–Uhlenbeck process – 113
- partial differential equation – 415
- polynomial errors-in-variables model – 203
- post-crisis model – 113
- prediction – 203
- premium calculation principle – 43
- process with independent increments – 291
- processes with finite variation – 135
- progressively equivalent (martingale) measures – 43
- queueing systems – 61
- random initial conditions – 79
- random velocity – 97
- reflected backward doubly stochastic differential equations – 157
- regenerative processes – 61
- regularly varying distribution – 315
- risk model with stochastic premiums – 245
- risk process – 221
- ruin probability – 221, 245
- second Wiener chaos – 267
- second-order Galton–Watson process with immigration – 315
- semiparametric estimation – 435
- short rate – 113
- shortfall risk – 379
- smoothness of the density – 291
- stationary process – 339
- stochastic cable equation – 449
- stochastic differential equation – 113
- stochastic linear growth condition – 157
- stochastic Lipschitz condition – 157
- stochastic measure – 449
- stochastic mutualism model – 1
- stochastic optimal control – 379
- stochastic partial differential equation – 339
- stochastic permanence – 1
- stochastic ultimate boundedness – 1
- stopping time – 135
- strong consistency – 339
- strong persistence in the mean – 1
- sub-Gaussian processes – 79
- sums of Gaussian squares – 267
- tail behavior – 315
- Volterra type Gaussian processes – 17
- Wright – 357
- zero-coupon bond – 113