



First-Passage Phenomena and Their Applications

By Ralf Et Al Metzler

Download now

Read Online ➔

First-Passage Phenomena and Their Applications By Ralf Et Al Metzler

The book contains review articles on recent advances in first-passage phenomena and applications contributed by leading international experts. It is intended for graduate students and researchers who are interested in learning about this intriguing and important topic.

Contents:

- Arrival Statistics and Exploration Properties of Mortal Walkers (*S B Yuste, E Abad and K Lindenberg*)
- First Passage of a Randomly Accelerated Particle (*T W Burkhardt*)
- First Passage Problems in Anomalous Diffusion (*A Rosso and A Zoia*)
- First-Passage Times of Intermittent Random Walks (*O Bénichou and R Voituriez*)
- First-Passage Phenomena on Finite Inhomogeneous Networks (*E Agliari and D Cassi*)
- Effective Spectral Dimension in Scale-Free Networks (*S Hwang, D-S Lee and B Kahng*)
- First-Passage Statistics for Random Walks in Bounded Domains (*R Voituriez and O Bénichou*)
- First Passage Behavior of Multi-Dimensional Fractional Brownian Motion and Application to Reaction Phenomena (*J-H Jeon, A V Chechkin and R Metzler*)
- Trajectory-to-Trajectory Fluctuations in First-Passage Phenomena in Bounded Domains (*T G Mattos, C Mejía-Monasterio, R Metzler, G Oshanin and G Schehr*)
- Exact Record and Order Statistics of Random Walk via First-Passage Ideas (*G Schehr and S N Majumdar*)
- First Passage in a Conical Geometry and Ordering of Brownian Particles (*E Ben-Naim and P L Krapivsky*)
- First Passage Time Problems in Biophysical Jump Processes with Fast Kinetics (*P C Bressloff and J M Newby*)
- First Passage Problems in Biology (*T Chou and M R D'Orsogna*)
- The Effect of Detection Mechanisms on Spatial Search and Foraging (*D Campos and V Méndez*)
- Search in Random Media with Lévy Flights (*E Gelenbe and O H*)

Abdelrahman)

- Exit Strategies: Visual Search and the Quitting Time Problem (*T S Horowitz*)
- Statistical Physics of Evolutionary Trajectories on Fitness Landscapes (*M Manhart and A V Morozov*)
- Some Applications of First-Passage Ideas to Finance (*R Chicheportiche and J-P Bouchaud*)
- First-Passage and Extremes in Socio-Economic Systems (*J Masoliver and J Perelló*)
- Transport and the First-Passage Time Problem with Application to Cold Atoms in Optical Traps (*E Barkai and D A Kessler*)
- The Excursion Set Theory in Cosmology (*M Maggiore and A Riotto*)
- Self-Organized Escape Processes of Linear Chains in Nonlinear Potentials (*T Gross, D Hennig and L Schimansky-Geier*)
- Efficient Monte Carlo Methods for Simulating Diffusion-Reaction Processes in Complex Systems (*D S Grebenkov*)

Readership: Researchers in stochastic processes, statistical physics, and mathematical physics.

Key Features:

- Comprehensive update of the classical book by Sidney Redner
- Applications to wide-ranging and active fields of research
- Well-known authors in the field

 [Download First-Passage Phenomena and Their Applications ...pdf](#)

 [Read Online First-Passage Phenomena and Their Applications ...pdf](#)

First-Passage Phenomena and Their Applications

By Ralf Et Al Metzler

First-Passage Phenomena and Their Applications By Ralf Et Al Metzler

The book contains review articles on recent advances in first-passage phenomena and applications contributed by leading international experts. It is intended for graduate students and researchers who are interested in learning about this intriguing and important topic.

Contents:

- Arrival Statistics and Exploration Properties of Mortal Walkers (*S B Yuste, E Abad and K Lindenberg*)
- First Passage of a Randomly Accelerated Particle (*T W Burkhardt*)
- First Passage Problems in Anomalous Diffusion (*A Rosso and A Zoia*)
- First-Passage Times of Intermittent Random Walks (*O Bénichou and R Voituriez*)
- First-Passage Phenomena on Finite Inhomogeneous Networks (*E Agliari and D Cassi*)
- Effective Spectral Dimension in Scale-Free Networks (*S Hwang, D-S Lee and B Kahng*)
- First-Passage Statistics for Random Walks in Bounded Domains (*R Voituriez and O Bénichou*)
- First Passage Behavior of Multi-Dimensional Fractional Brownian Motion and Application to Reaction Phenomena (*J-H Jeon, A V Chechkin and R Metzler*)
- Trajectory-to-Trajectory Fluctuations in First-Passage Phenomena in Bounded Domains (*T G Mattos, C Mejía-Monasterio, R Metzler, G Oshanin and G Schehr*)
- Exact Record and Order Statistics of Random Walk via First-Passage Ideas (*G Schehr and S N Majumdar*)
- First Passage in a Conical Geometry and Ordering of Brownian Particles (*E Ben-Naim and P L Krapivsky*)
- First Passage Time Problems in Biophysical Jump Processes with Fast Kinetics (*P C Bressloff and J M Newby*)
- First Passage Problems in Biology (*T Chou and M R D'Orsogna*)
- The Effect of Detection Mechanisms on Spatial Search and Foraging (*D Campos and V Méndez*)
- Search in Random Media with Lévy Flights (*E Gelenbe and O H Abdelrahman*)
- Exit Strategies: Visual Search and the Quitting Time Problem (*T S Horowitz*)
- Statistical Physics of Evolutionary Trajectories on Fitness Landscapes (*M Manhart and A V Morozov*)
- Some Applications of First-Passage Ideas to Finance (*R Chichportiche and J-P Bouchaud*)
- First-Passage and Extremes in Socio-Economic Systems (*J Masoliver and J Perelló*)
- Transport and the First-Passage Time Problem with Application to Cold Atoms in Optical Traps (*E Barkai and D A Kessler*)
- The Excursion Set Theory in Cosmology (*M Maggiore and A Riotto*)
- Self-Organized Escape Processes of Linear Chains in Nonlinear Potentials (*T Gross, D Hennig and L Schimansky-Geier*)
- Efficient Monte Carlo Methods for Simulating Diffusion-Reaction Processes in Complex Systems (*D S Grebenkov*)

Readership: Researchers in stochastic processes, statistical physics, and mathematical physics.

Key Features:

- Comprehensive update of the classical book by Sidney Redner
- Applications to wide-ranging and active fields of research
- Well-known authors in the field

First-Passage Phenomena and Their Applications By Ralf Et Al Metzler Bibliography

- Rank: #1233820 in eBooks
- Published on: 2014-03-21
- Released on: 2014-03-21
- Format: Kindle eBook

 [Download First-Passage Phenomena and Their Applications ...pdf](#)

 [Read Online First-Passage Phenomena and Their Applications ...pdf](#)

Editorial Review

From the Inside Flap

The book contains review articles on recent advances in first-passage phenomena and applications contributed by leading international experts. It is intended for graduate students and researchers who are interested in learning about this intriguing and important topic.

Users Review

From reader reviews:

Gail Kernan:

The book First-Passage Phenomena and Their Applications give you a sense of feeling enjoy for your spare time. You may use to make your capable much more increase. Book can to get your best friend when you getting anxiety or having big problem with the subject. If you can make looking at a book First-Passage Phenomena and Their Applications to get your habit, you can get a lot more advantages, like add your capable, increase your knowledge about a few or all subjects. You could know everything if you like wide open and read a reserve First-Passage Phenomena and Their Applications. Kinds of book are a lot of. It means that, science publication or encyclopedia or some others. So , how do you think about this publication?

Lisa McCann:

Are you kind of stressful person, only have 10 or even 15 minute in your day to upgrading your mind skill or thinking skill also analytical thinking? Then you have problem with the book than can satisfy your short time to read it because this time you only find publication that need more time to be read. First-Passage Phenomena and Their Applications can be your answer since it can be read by anyone who have those short time problems.

Mary Parker:

The book untitled First-Passage Phenomena and Their Applications contain a lot of information on that. The writer explains the girl idea with easy method. The language is very easy to understand all the people, so do certainly not worry, you can easy to read this. The book was compiled by famous author. The author will bring you in the new age of literary works. You can easily read this book because you can continue reading your smart phone, or gadget, so you can read the book with anywhere and anytime. If you want to buy the e-book, you can wide open their official web-site and order it. Have a nice learn.

Carl Johnson:

Many people spending their moment by playing outside with friends, fun activity along with family or just watching TV 24 hours a day. You can have new activity to enjoy your whole day by studying a book. Ugh, you think reading a book really can hard because you have to bring the book everywhere? It alright you can have the e-book, taking everywhere you want in your Mobile phone. Like First-Passage Phenomena and Their Applications which is keeping the e-book version. So , try out this book? Let's observe.

Download and Read Online First-Passage Phenomena and Their Applications By Ralf Et Al Metzler #7S6MXNPEFDC

Read First-Passage Phenomena and Their Applications By Ralf Et Al Metzler for online ebook

First-Passage Phenomena and Their Applications By Ralf Et Al Metzler Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read First-Passage Phenomena and Their Applications By Ralf Et Al Metzler books to read online.

Online First-Passage Phenomena and Their Applications By Ralf Et Al Metzler ebook PDF download

First-Passage Phenomena and Their Applications By Ralf Et Al Metzler Doc

First-Passage Phenomena and Their Applications By Ralf Et Al Metzler Mobipocket

First-Passage Phenomena and Their Applications By Ralf Et Al Metzler EPub

7S6MXNPEFDC: First-Passage Phenomena and Their Applications By Ralf Et Al Metzler