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| 1. Record Nr.           | UNINA9910780898203321   |
| Autore                  | Kruuk H (Hans)  |
| Titolo                  | Niko's nature : the life of Niko Tinbergen and his science of animal behaviour // Hans Kruuk ; with drawings and photographs by Niko Tinbergen  |
| Pubbl/distr/stampa      | Oxford : , : Oxford University Press, , [2003]<br>©2003   |
| ISBN                    | 1-383-02278-X<br>0-19-154539-2<br>1-280-86972-0<br>9786610869725<br>0-19-162247-8   |
| Descrizione fisica      | 1 online resource (774 p.)  |
| Disciplina              | 591.5/092<br>591.5092   |
| Soggetti                | Ethologists - Netherlands<br>Animal behavior  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Description based upon print version of record.   |
| Nota di bibliografia    | Includes bibliographical references (pages [347]-371) and indexes.  |
| Nota di contenuto       | Cover Page; Title Page; Copyright Page; Contents; List of photos in the text; Chapter 1 Wild birds and science; Chapter 2 A Dutch upbringing; Home, siblings, friends, and school; Youth organized for nature; A trip abroad; Chapter 3 Student years and Greenland; Playing truant; PhD time; Greenland; Chapter 4 Ethologist in the 1930s; Leiden after Greenland; Camping with the wasps; Experiments in Leiden; Niko and Konrad; Leiden after Lorenz; Chapter 5 The Second World War and after; German occupation; Leiden after the war; Productivity, ideas, and travel; The study of instinct; Move to Oxford<br>Chapter 6 Starting again: Oxford in the 1950sArrival; The 'Hard Core'; Writing and science; Students in the late 1950s; Research projects; Niko and academia; Home and career; Chapter 7 Niko's two worlds: Oxford in the 1960s; Dunes, birds, and beasts; The four whys; Walney; Serengeti; Photography and filming; Oxford academia again, Niko's other world; Writing, lecturing, and conferences; Ethology and |

humanity; The black dog, at home, at work, everywhere; Chapter 8 The Nobel Prize, and human behaviour; Nobel laureate; Childhood autism; The Alexander technique; Chapter 9 Winding down; Retirement Old friends A family, a cottage, a life; Chapter 10 Niko's legacy; An evaluation; Output: publications and impact; Rewards; Science that followed; Torch-bearers; Memories; Notes; Niko Tinbergen's publications; Index of proper names; Index of subjects

**Sommario/riassunto**

A charismatic naturalist, bird-watcher, teacher, artist, photographer, film-maker, and winner of the Nobel Prize, Niko Tinbergen was a prominent and influential scientist. Jointly with Konrad Lorenz, he laid the foundation for a new science, the biological study of animal behaviour. 'Ethology', and his talent for devising behaviour-testing experiments, provided an outlet for Niko's enthusiasm for gulls and sticklebacks, snow-buntings and foxes, wasps and falcons, and even children. This first full-length biography of Niko Tinbergen, lavishly illustrated with many of Niko's own drawings, describ

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| 2. Record Nr.           | UNINA9910254291403321   |
| Autore                  | Lanchier Nicolas  |
| Titolo                  | Stochastic Modeling // by Nicolas Lanchier  |
| Pubbl/distr/stampa      | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017   |
| ISBN                    | 3-319-50038-4   |
| Edizione                | [1st ed. 2017.]   |
| Descrizione fisica      | 1 online resource (XIII, 303 p. 63 illus., 6 illus. in color.)  |
| Collana                 | Universitext, , 0172-5939   |
| Disciplina              | 003.76  |
| Soggetti                | Probabilities<br>Mathematical models<br>Probability Theory and Stochastic Processes<br>Mathematical Modeling and Industrial Mathematics |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di bibliografia    | Includes bibliographical references and index.  |
| Nota di contenuto       | 1. Basics of Measure and Probability Theory -- 2. Distribution and Conditional Expectation -- 3. Limit Theorems -- 4. Stochastic        |

Processes: General Definition -- 5. Martingales -- 6. Branching Processes -- 7. Discrete-time Markov Chains -- 8. Symmetric Simple Random Walks -- 9. Poisson Point and Poisson Processes -- 10. Continuous-time Markov Chains -- 11. Logistic Growth Process -- 12. Wright-Fisher and Moran Models -- 13. Percolation Models -- 14. Interacting Particle Systems -- 15. The Contact Process -- 16. The Voter Model -- 17. Numerical Simulations in C and Matlab.

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## Sommario/riassunto

Three coherent parts form the material covered in this text, portions of which have not been widely covered in traditional textbooks. In this coverage the reader is quickly introduced to several different topics enriched with 175 exercises which focus on real-world problems. Exercises range from the classics of probability theory to more exotic research-oriented problems based on numerical simulations. Intended for graduate students in mathematics and applied sciences, the text provides the tools and training needed to write and use programs for research purposes. The first part of the text begins with a brief review of measure theory and revisits the main concepts of probability theory, from random variables to the standard limit theorems. The second part covers traditional material on stochastic processes, including martingales, discrete-time Markov chains, Poisson processes, and continuous-time Markov chains. The theory developed is illustrated by a variety of examples surrounding applications such as the gambler's ruin chain, branching processes, symmetric random walks, and queueing systems. The third, more research-oriented part of the text, discusses special stochastic processes of interest in physics, biology, and sociology. Additional emphasis is placed on minimal models that have been used historically to develop new mathematical techniques in the field of stochastic processes: the logistic growth process, the Wright-Fisher model, Kingman's coalescent, percolation models, the contact process, and the voter model. Further treatment of the material explains how these special processes are connected to each other from a modeling perspective as well as their simulation capabilities in C and Matlab™.

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