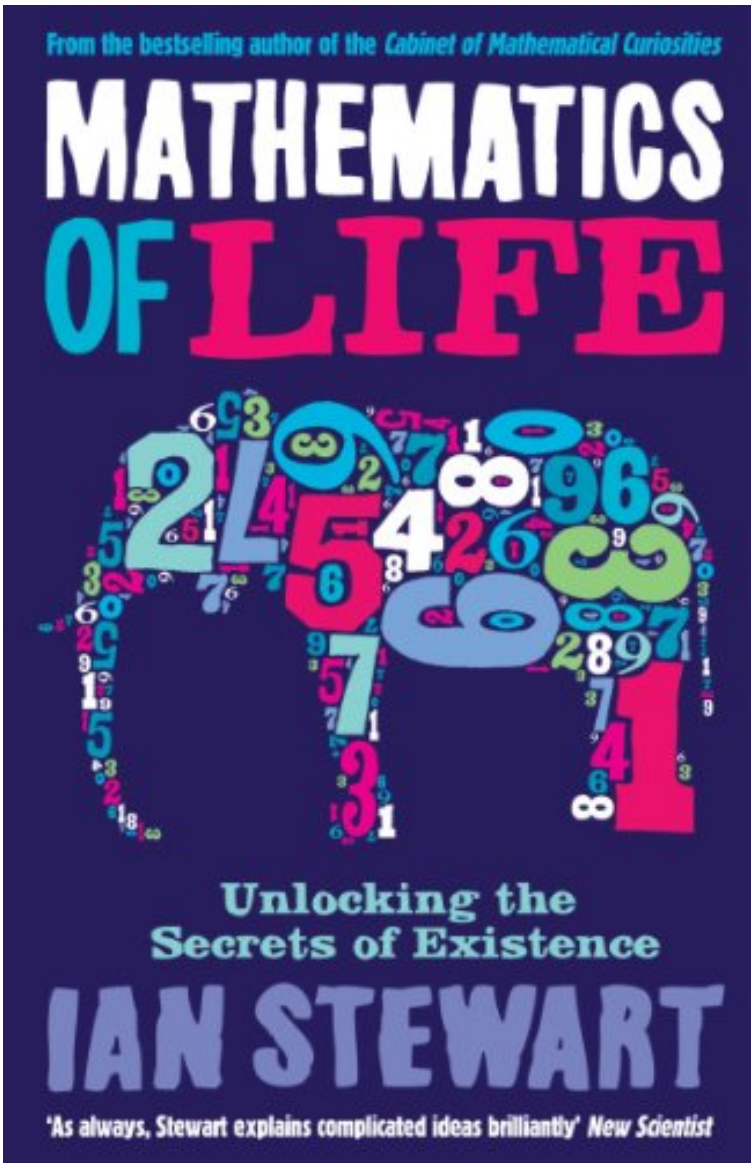
Mathematics Of Life: Unlocking the Secrets of Existence



Par Ian Stewart
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Par Ian Stewart : Mathematics Of Life: Unlocking the Secrets of Existence before purchasing it in order to gage whether or not it would be worth my time, and all praised Mathematics Of Life: Unlocking the Secrets of Existence:

Description :

Prsentation de l'diteurA new partnership of biologists and mathematicians is picking apart the hidden complexity of animals and plants to throw fresh light on the behaviour of entire organisms, how they interact and how changes in biological diversity affect the planet's ecological balance. Mathematics offers new and sometimes startling perspectives on evolution and how patterns of inheritance and population work out over time-scales ranging from millions to hundreds of years - as well as what's going on to change us right now.Ian Stewart, in characteristically clear and entertaining fashion, explores these and a whole range of

pertinent issues, including how far genes control behaviour and the nature of life itself. He shows how far mathematicians and biologists are succeeding in tackling some of the most difficult scientific problems the human race has ever confronted and where their research is currently taking us.Revue de presse"An ingenious overview of biology with emphasis on mathematical ideas--stimulating."Kirkus"Stewart flexes his mathematical muscles when he explores concepts like symmetrical viruses and puzzle-solving slime moulds. As always, he explains complicated mathematical ideas brilliantly."New Scientist"A timely account of why biologists and mathematicians are hooking up at last.... Stewart is Britain's most brilliant and prolific populariser of mathematics.... Mathematics of Life is dense with information, written with Stewart's characteristic lightness of touch and will please the dedicated maths reader.... [T]he book is a testament to the versatility of maths and how it is shaping our understanding of the world."The Guardian"It is difficult to find many biologists who enjoy math, or vice versa, but British number cruncher Ian Stewart successfully crosses over. Here he argues that solving some of the biggest scientific mysteries, including life's origins and prevalence in the universe, hinges on a union of these fields. He skillfully recasts the history of biology within a mathematical context...then applies his left-brained perspective to the hot new field of astrobiology. Bio majors: Try the book, then bite the bullet and enroll in Math 101."Discover"Though a complete understanding of how mathematics pries secrets out of nature requires long and rigorous study, Stewart conveys to general readers the fundamental axioms with lucidly accessible writing, supplemented with helpful charts and illustrations.... A rewarding adventure for the armchair scientist."Booklist "The Mathematics of Life is at its best in discussing the role that the discipline has played in our understanding of viruses.... Mr. Stewart's discussion of the intersection of viruses and geometry, and other topics, is absorbing."Keith Devlin, Wall Street Journal"Stewart revels in intellectual wanderlust, taking us from explanations of why Fibonnaci's sequence shows up so often in nature to rather in-depth treatments of evolutionary theory to number-crunching the possibilities of life on other planets.... Stewart is great at communicating wonder, but it's often his skepticism that makes The Mathematics of Lifesuch an enjoyable read-you get the sense that as a man who fully grasps numbers, he doesn't take kindly to how frequently they are abused in mainstream treatments of science."Boston Globe"In this engaging overview, a mathematician describes how the field of biomathematics is answering key questions about the natural world and the origins of life."Science NewsPrsentation de l'diteurA new partnership of biologists and mathematicians is picking apart the hidden complexity of animals and plants to throw fresh light on the behaviour of entire organisms, how they interact and how changes in biological diversity affect the planet's ecological balance. Mathematics offers new and sometimes startling perspectives on evolution and how patterns of inheritance and population work out over time-scales ranging from millions to hundreds of years - as well as what's going on to change us right now.Ian Stewart, in characteristically clear and entertaining fashion, explores these and a whole range of pertinent issues, including how far genes control behaviour and the nature of life itself. He shows how far mathematicians and biologists are succeeding in tackling some of the most difficult scientific problems the human race has ever confronted and where their research is currently taking us.