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Sommario/riassunto	"For centuries, mathematicians have tried, and failed, to solve the zeta-3 problem. This problem is simple in its formulation, but remains unsolved to this day, despite the attempts of some of the world's greatest mathematicians to solve it. The problem can be stated as follows: is there a simple symbolic formula for the following sum: $1+(1/2)^3+(1/3)^3+(1/4)^3+...$? Although it is possible to calculate the approximate numerical value of the sum (for those interested, it's 1.20205...), there is no known symbolic expression. A symbolic formula would not only provide an exact value for the sum, but would allow for greater insight into its characteristics and properties. The answers to these questions are not of purely academic interest; the zeta-3 problem has close connections to physics, engineering, and other areas of mathematics. Zeta-3 arises in quantum electrodynamics and in number theory, for instance, and it is closely connected to the Riemann hypothesis. In In Pursuit of zeta-3, Paul Nahin turns his sharp, witty eye on the zeta-3 problem. He describes the problem's history, and provides numerous "challenge questions" to engage readers, along with Matlab code. Unlike other, similarly challenging problems, anyone with a basic mathematical background can understand the problem-making it an ideal choice for a pop math book"-- "An engrossing look at the history and importance of a centuries-old but still unanswered math problemFor centuries, mathematicians the world over have tried, and failed, to solve the zeta-3 problem. Math genius Leonhard Euler attempted it in the 1700s and came up short. The straightforward puzzle considers if there exists a simple symbolic formula for the following: $1+(1/2)^3+(1/3)^3+(1/4)^3+$. . . . But why is this issue-the sum of the reciprocals of the positive integers cubed-so important? With In Pursuit of Zeta-3, popular math writer Paul Nahin investigates the history and significance of this mathematical conundrum.Drawing on detailed examples, historical anecdotes, and even occasionally poetry, Nahin sheds light on the richness of the nature of zeta-3. He shows its intimate connections to the Riemann hypothesis, another mathematical mystery that has stumped mathematicians for nearly two centuries. He looks at its links with Euler's achievements and explores the modern research area of Euler sums, where zeta-3 occurs frequently. An exact solution to the zeta-3 question wouldn't simply satisfy pure mathematical interest: it would have critical ramifications for applications in physics and engineering, such as quantum electrodynamics. Challenge problems with detailed solutions and MATLAB code are included at the end of each of the book's sections.Detailing the trials and tribulations of mathematicians who have approached one of the field's great unsolved riddles, In Pursuit of Zeta-3 will tantalize curious math enthusiasts everywhere"--