

Information Theory, Evolution, and the Origin of Life presents a timely introduction to the use of information theory and coding theory in molecular biology. The genetical information system, because it is linear and digital, resembles the algorithmic language of computers. George Gamow pointed out that the application of Shannon's information theory breaks genetics and molecular biology out of the descriptive mode into the quantitative mode, and Dr. Yockey develops this theme, discussing how information theory and coding theory can be applied to molecular biology. He discusses how these tools for measuring the information in the sequences of the genome and the proteome are essential for our complete understanding of the nature and origin of life. The author writes for both mathematicians and molecular and evolutionary biologists, with more advanced mathematical concepts included in an appendix for reference.

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