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| Nota di contenuto | Cover; Half Title; Title Page; Copyright; Dedication; Contents; Preface; Acknowledgements; Introduction; Philosophy of science as epistemology and metaphysics; Part I: The Scientific Method; 1. Induction and Inductivism; 1.1 The sceptic's challenge; 1.2 The scientific revolution; 1.3 The 'new tool' of induction; 1.4 (Naive) inductivism; Further reading; 2. The Problem of Induction and Other Problems with Inductivism; 2.1 The problem of induction; 2.2 Solutions and dissolutions of the problem of induction; 2.3 Inductivism and the history of science; 2.4 Theory and observation; 2.5 Conclusions Further reading3. Falsificationism; 3.1 Popper and the critique of Marxism and psychoanalysis; 3.2 Popper's solution to the problem of induction; 3.3 The context of discovery and the context of justification; 3.4 The Duhem problem; 3.5 Problems with falsificationism; 3.6 Conclusions; Further reading; 4. Revolutions and Rationality; 4.1 The received view of science; 4.2 Kuhn's revolutionary history of science; 4.3 Paradigms and normal science; 4.4 The Copernican revolution; 4.5 Theory and observation; 4.6 Incommensurability; 4.7 Relativism and the role of reason in science; Further reading |

Part II: Realism and Antirealism about Science5. Scientific Realism; 5.1 Appearance and reality; 5.2 The metaphysics of the external world; 5.3 Semantics; 5.4 Standard scientific realism; 5.5 Antirealism; Further reading; 6. Underdetermination; 6.1 Underdetermination; 6.2 Constructive empiricism; Further reading; 7. Explanation and Inference; 7.1 Explanation; 7.2 Inference to the best explanation; 7.3 Common sense, realism and constructive empiricism; Further reading; 8. Realism About What?; 8.1 Theory change; 8.2 Multiple models; 8.3 Idealisation; 8.4 Structural realism; Further reading

GlossaryBibliography; Index

Sommario/riassunto

Few can imagine a world without telephones or televisions; many depend on computers and the Internet as part of daily life. Without scientific theory, these developments would not have been possible. In this exceptionally clear and engaging introduction to philosophy of science, James Ladyman explores the philosophical questions that arise when we reflect on the nature of the scientific method and the knowledge it produces. He discusses whether fundamental philosophical questions about knowledge and reality might be answered by science, and considers in detail the debate between realist
