Lakatos' essays were published posthumously in in two volumes edited by former students. Proofs and *Refutations* is published separately. His interest in the philosophy of science focused on the growth, degeneration and criticism of scientific research programmes. Lakatos rewrites the histories of several famous scientific episodes in terms of their persistent anomalies or contradictions, and the hindsight needed to interpret what just what had been learned.



Criticism and the Growth of Knowledge

> EDITED BY IMRE LAKATOS & ALAN MUSGRAVE

> > PAUL FEYERABEND THOMAS KUHN IMRE LAKATOS MARGARET MASTERMAN KARL POPPER STEPHEN TOULMIN JOHN WATKINS L PEARCE WILLIAMS

Still a philosophical classic for the ideas of Kuhn, Popper, Feyerabend and Lakatos. The papers were based on a conference on Thomas Kuhn's *The Structure of Scientific Revolutions* and organized by Lakatos at Bedford College (London) in 1965.

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*Proofs and Refutations* is written as a dialogue involving 18 characters named Alpha, Beta, et al., plus a Teacher. The footnotes document the actual history of mathematics discussed in the reconstructed dialogue on Euler's theorem, which states that for any polyhedron, the number of vertices minus the number of edges plus the number of faces is 2: V-E+F=2. The content ranges from high-school geometry to advanced ideas of modern mathematics. Lakatos' philosophical achievement was to explain the historical origins of modern mathematical proof using historiographic and pedagogical ideas found in Hegel's modern classic *The Phenomenology of Spirit*.