Record Nr. UNINA9910452151003321 Springs of scientific creativity [[electronic resource]]: essays on Titolo founders of modern science / / Rutherford Aris, H. Ted Davis, Roger H. Stuewer, editors Minneapolis, : University of Minnesota Press, c1983 Pubbl/distr/stampa 0-8166-5527-8 **ISBN** 1-4356-0622-1 Descrizione fisica 1 online resource (354 p.) Altri autori (Persone) ArisRutherford DavisH. Ted (Howard Ted) StuewerRoger H Disciplina 509/.2/2 Soggetti Physics - History **Physicists** Scientists Creative ability in science Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface; Contents; Chapter 1. Galileo and Early Experimentation; Chapter 2. Newton's Development of the Principia; Chapter 3. The Origins and Consequences of Certain of J. P. Joule's Scientific Ideas; Chapter 4. Maxwell's Scientific Creativity; Chapter 5. The Scientific Style of Josiah Willard Gibbs; Chapter 6. Principal Scientific Contributions of John William Strutt, Third Baron Rayleigh; Chapter 7. Elmer Sperry and Adrian Leverkuhn: A Comparison of Creative Styles: Chapter 8. Walther Nernst and the Application of Physics to Chemistry

Chapter 11. Michael Polanyi's Creativity in Chemistry; Chapter 12. The Role of John von Neumann in the Computer Field; Contributors; Index Sommario/riassunto

Springs of Scientific Creativity was first published in 1983.

Mathematician Henri Poincare was boarding a bus when he realized that the transformations of non-Euclidian geometry were just those he

Chapter 9. Albert Einstein and the Creative Act: The Case of Special RelativityChapter 10. Erwin Schrodinger and the Descriptive Tradition;

needed in his research on the theory of functions. He did not have to interrupt his conversation, still less to verify the equation in detail; his insight was complete at that point. Poincare's insight into his own creativity -- his awareness that preliminary cogitation and the working of the subconscious had prepared his mind for an intuitive flash of recognition -- is just one of many possible anal