Record Nr. UNINA9910831012903321 Autore Bassi Angelo **Titolo** Physics and the Nature of Reality [[electronic resource]]: Essays in Memory of Detlef Dürr / / edited by Angelo Bassi, Sheldon Goldstein, Roderich Tumulka, Nino Zanghì Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2024 3-031-45434-0 **ISBN** Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (440 pages) Fundamental Theories of Physics, , 2365-6425;; 215 Collana Altri autori (Persone) GoldsteinSheldon TumulkaRoderich ZanghìNino Disciplina 530.12 Soggetti Quantum physics Science Quantum electrodynamics Statistical Mechanics Physics - Philosophy **Quantum Physics** Foundations of Physics and Cosmology Quantum Electrodynamics, Relativistic and Many-body Calculations Philosophy of Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Some Things I Have Learned From Detlef Dürr -- Detlef Dürr's Path Nota di contenuto from Mechanics of the Brownian Motion to the Mechanics of the Quantum World -- Detlef the Adventurer -- Why Bohm and Only Bohm? -- The Prodigy That Time Forgot: The Incredible and Untold Story of John von Newton -- Bohmian Collapse -- Generic Contextuality. This volume commemorates the scientific contributions of Detlef Dürr Sommario/riassunto (1951–2021) to foundational questions of physics. It presents new contributions from his former students, collaborators, and colleagues about their current research on topics inspired or influenced by Dürr.

These topics are drawn from physics, mathematics, and philosophy of

nature, and concern interpretations of quantum theory, new developments of Bohmian mechanics, the role of typicality, quantum physics in relativistic space-time, classical and quantum electrodynamics, and statistical mechanics. The volume thus also gives a snapshot of present research in the foundations of physics.