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Nota di contenuto	Contents -- Preface -- List of Participants -- Outline of Quantum Mechanics -- 1. The setting for quantum mechanics -- 2. The Schrödinger equation -- 3. Self-adjoint operators -- 4. The role of Planck's constant -- 5. Spin and statistics -- 6. Fundamental structures of quantum mechanics -- Inequalities for Schrödinger Operators and Applications to the Stability of Matter Problem -- Trace Inequalities and Quantum Entropy: An Introductory Course -- 1. Introduction -- 2. Operator convexity and monotonicity -- 3. The joint convexity of certain operator functions -- 4. Projections onto *-subalgebras and convexity inequalities -- 5. Tensor products -- 6. Lieb's Concavity Theorem and related results -- 7. Lp norms for matrices and entropy inequalities -- 8. Brascamp-Lieb type inequalities for traces -- Acknowledgements -- References -- Lieb-Robinson Bounds in Quantum Many-Body Physics -- Remarks on the Additivity Conjectures for Quantum Channels -- On the Static and Dynamical Collapse of White Dwarfs --