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Nota di contenuto	<p>CONTENTS; Preface; Central Extension of Virasoro Type Subalgebras of the Zamolodchikov-w1 Lie Algebra L. Accardi and A. Boukas; 1. Introduction; 2. Closed subalgebras of w; 3. Abelian sub-algebras of w; 4. Basic facts on central extensions of Lie algebras; 5. Central extensions of wN; References; Entanglement Protection and Generation Under Continuous Monitoring A. Barchielli and M. Gregoratti; 1. Introduction; 1.1. Two qubits; 1.2. Concurrence; 2. Global evolution and continuous measurements; 2.1. HP evolutions; 2.2. From the HP-equation to the SSE</p> <p>2.3. Interacting and non-interacting subsystems3. No direct or indirect interaction; 3.1. The a posteriori concurrence; 3.2. Only local detection operators; 3.2.1. Diffusive case; 3.2.2. Jump case; 3.3. An example with general detection operators; 3.3.1. Concurrence of the a priori state; 3.3.2. Local detection operators; 3.3.3. Non local detection operators; 4. An example with indirect interaction; References; Completely Positive Transformations of Quantum Operations G. Chiribella, A. Toigo and V. Umanita; 1. Introduction; 2. Notations and preliminary results</p> <p>2.1. Increasing sequences of normal CP maps2.2. Tensor product of weak*-continuous CB maps; 3. Quantum supermaps; 4. Dilation of</p>

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Sommario/riassunto

This volume contains the current research in quantum probability, infinite dimensional analysis and related topics. Contributions by experts in these fields highlight the latest developments and interdisciplinary connections with classical probability, stochastic analysis, white noise analysis, functional analysis and quantum information theory. This diversity shows how research in quantum probability and infinite dimensional analysis is very active and strongly involved in the modern mathematical developments and applications. Tools and techniques presented here will be of great value to research

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