

Perturbative Algebraic Quantum Field Theory

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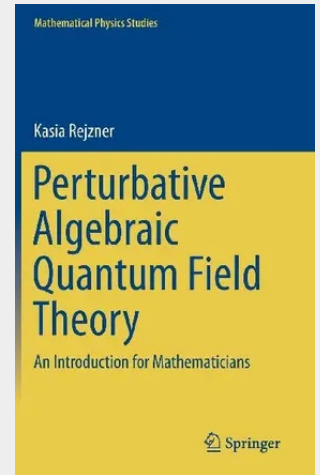
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pQFT models describe a wide range of physical phenomena and have remarkable agreement with experimental results. Despite this success, the theory suffers from many conceptual problems. pAQFT is a good candidate to solve many, if not all, of these conceptual problems.

Chapters 1-3 provide some background in mathematics and physics. Chapter 4 concerns classical theory of the scalar field, which is subsequently quantized in chapters 5 and 6. Chapter 7 covers gauge theory and chapter 8 discusses effective quantum gravity.

The book aims to be accessible to researchers and graduate students, who are interested in the mathematical foundations of pQFT.

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