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Nota di contenuto	<p>Intro -- SUPERSTRING THEORY IN THE 21ST CENTURY. HORIZONS IN WORLD PHYSICS. VOLUME 270 -- SUPERSTRING THEORY IN THE 21ST CENTURY. HORIZONS IN WORLD PHYSICS. VOLUME 270 -- CONTENTS -- PREFACE -- Chapter 1 CLASSIFICATION OF ELEMENTARY PARTICLES IN THE PHASE-TREES THEORY -- ABSTRACT -- ELEMENTARY PARTICLES EP(4,6) OF RANGE FOUR -- ELEMENTARY PARTICLES EP(5,7) OF RANGE FIVE -- ELEMENTARY EIGHT-STORY PHASE TREES OF RANGE SIX -- REFERENCES --</p> <p>Chapter 2 MODULAR FORMS AND SUPERSTRING AMPLITUDES -- Abstract -- 1. Introduction -- 1.1. The Bosonic History -- Conclusion -- 1.2. Supersymmetric Strings -- 2. The General Ansatz -- 3. Mathematical Background -- 3.1. The Symplectic Group -- 3.2. The Action of Sp(2g) on the Theta Characteristics -- 3.3. Modular Forms -- 3.4. Theta Constants with Characteristic -- 3.5. The Subgroup O+(2g) of Sp(2g) -- 3.6. Theta Constants and the Heisenberg Group -- 3.7. Turning back to the classical theta constants with characteristic -- 3.8. Modular group and representations -- 4. Some Remarks on the Constraints -- 5. Existence and Uniqueness of the Forms 8[] -- 5.1. The case g = 1 -- 5.2. The case g = 2 -- 5.3. The case g = 3 -- 5.4. Representations of Sp(6) -- 5.5. The uniqueness of 8[0(3)] -- 5.6. The case g = 4 -- 5.7. The Sp(8)-representation on M -- 5.8. The cosmological constant in g = 3, g = 4 -- 6. Conclusion -- Acknowledgments -- A Restricted and Induced Representations -- References --</p> <p>Chapter 3 THE COSMOLOGY OF THE TYPE IIB SUPERSTRING THEORY WITH FLUX</p>

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