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The book is organized in three sections: the first section contains a brief introduction to the Standard Model, supersymmetry and the Minimal Supersymmetric Standard Model. Then SUSY GUTs in four space-time dimensions are introduced and reviewed. In addition, the cosmological issues concerning SUSY GUTs are discussed. Then the requirements for embedding a 4D SUSY GUT into higher-dimensional theories including gravity (i.e. String Theory) are investigated. Accordingly, section two of the course is devoted to discussing the so-called Orbifold GUTs and how in turn they solve some of the technical problems of 4D SUSY GUTs. Orbifold GUTs introduce a new set of open issues, which are then resolved in the third section in which it is shown how to embed Orbifold GUTs into the $E(8) \times E(8)$ Heterotic String in 10 space-time dimensions.



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