Physics 234A: String Theory

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Homework 5.

1 Problem: Supersymmetric Quantum Mechanics

1.1

B.B.S. 4.1.

1.2

B.B.S. 4.2.

1.3

B.B.S. 4.3

2 Problem: Superstring Spectrum

2.1

B. B. S. 4.5.

2.2

B.B.S. 4.6.

2.3

B.B.S. 4.7.

3 Problem: BRST symmetry of Superstring

3.1

Starting from the definition for the BRST operator in superstring, eqn 4.150 of B.B.S. derive the transformations of the fields in eqns (4.144) to (4.149) of B.B.S.

3.2

B.B.S 4.13.

3.3

B.B.S. 4.15.