

# Contents

<b>1. Introduction</b> .....	<b>1</b>
<b>2. Introduction to Fractional Statistics in Two Dimensions</b> ....	<b>5</b>
<b>3. Fractional Statistics in the Chern-Simons Gauge</b> .....	<b>23</b>
3.1 The Cyon System and Its Symmetries .....	23
3.2 Chern-Simons Construction of Fractional Statistics .....	28
<b>4. Fractional Statistics in the Anyon Gauge</b> .....	<b>39</b>
<b>5. Non-relativistic Chern-Simons Field Theory</b> .....	<b>43</b>
<b>6. Anyons in a Magnetic Field</b> .....	<b>59</b>
6.1 The Eigenvalue Problem .....	60
6.2 Step Operators and Wavefunctions .....	66
6.3 Closed-Form Eigenstates .....	74
6.4 Perturbation Theory and the Three-Anyon Problem .....	82
6.A Appendix .....	88
<b>7. Statistical Mechanics of Anyons</b> .....	<b>91</b>
7.1 Partition Functions .....	92
7.2 Virial Coefficients .....	99
7.3 Magnetic Moment .....	105
<b>8. Anyons and the Fractional Quantum Hall Effect</b> .....	<b>109</b>
<b>9. Anyons and Conformal Field Theories</b> .....	<b>123</b>
<b>References</b> .....	<b>133</b>