## Integer Quantum Hall Effect

A. Tarafdar, D. Michienzi, R G. Ramos, S. Hopkins, T. Berlad, T. Rawlings

H. H. Wills Physics Laboratory Tyndall Avenue, Bristol BS8 1TL, United Kingdom

Abstract

ABSTRACT GOES HERE

## Contents

1	Introduction	2
	1.1 Motivation	2
	1.2 Classical Hall Effect	
	1.3 Experimental	2
2	Quantized Hall Plateaus	2
3	Landau Levels	2
4	Berry Phase	2
	4.1 Adiabatic Theorem	2
	4.2 Geometric Phases	
	4.3 Berry Curvature	2
5	Topology	2
	5.1 Chern Numbers	2
	5.2 TKNN Invariance	2

## 1 Introduction

- 1.1 Motivation
- 1.2 Classical Hall Effect
- 1.3 Experimental
- 2 Quantized Hall Plateaus
- 3 Landau Levels
- 4 Berry Phase
- 4.1 Adiabatic Theorem
- 4.2 Geometric Phases
- 4.3 Berry Curvature
- 5 Topology
- 5.1 Chern Numbers
- 5.2 TKNN Invariance

У