#### UNIVERSITY OF CALIFORNIA SANTA CRUZ

#### EMERGENT PHENOMENA IN ACTIVE POLYMER ARRAYS

A dissertation submitted in partial satisfaction of the requirements for the degree of

#### DOCTOR OF PHILOSOPHY

in

PHYSICS

by

Stephen E. Martin

June 2018

is ap	proved:
	Professor Joshua Deutsch, Chair
	Professor Onuttom Narayan
	Professor Alexander Sher

The Dissertation of Stephen E. Martin

Dean Tyrus Miller Vice Provost and Dean of Graduate Studies Copyright © by

Stephen E. Martin

2018

### Table of Contents

List of Figures	iv
List of Tables	$\mathbf{v}$
Abstract	vi
Dedication	vii
Acknowledgments	viii
I First Part	1
1 Introduction	2
2 Previous Work	4
3 Conclusion	6
A Some Ancillary Stuff	7

# List of Figures

2.1	A first figure.	4
2.2	A second figure	5

### List of Tables

1.1	A normalsize table. There has been a complaint that table captions are	
	not single-spaced. This is odd because the code indicates that they should	
	be	2
1.2	A small table	3

#### Abstract

Emergent Phenomena in Active Polymer Arrays

by

Stephen E. Martin

Theses have elements. Isn't that nice?

To myself,

Perry H. Disdainful,

the only person worthy of my company.

#### ${\bf Acknowledgments}$

I want to "thank" my committee, without whose ridiculous demands, I would have graduated so, so, very much faster.

# Part I

First Part

#### Chapter 1

#### Introduction

Every dissertation should have an introduction. You might not realize it, but the introduction should introduce the concepts, backgrouand, and goals of the dissertation.

Title	Author
War And Peace	Leo Tolstoy
The Great Gatsby	F. Scott Fitzgerald

Table 1.1: A normal size table. There has been a complaint that table captions are not single-spaced. This is odd because the code indicates that they should be.

Table 1.2: A small table.

Title	Author
War And Peace	Leo Tolstoy
The Great Gatsby	F. Scott Fitzgerald

# Chapter 2

### Previous Work

Some other research was once performed.

Figure 2.1: A first figure.

Figure 2.2: A second figure.

Chapter 3

Conclusion

## Appendix A

# Some Ancillary Stuff

Ancillary material should be put in appendices, which appear after the bibliography.