

LIST OF CONTENTS

TITLE PAGE	
APPROVAL PAGE	i
SELF DECLARATION AGAINST PLAGIARISM	ii
ABSTRACT	iii
PREFACE	iv
DEDICATION	v
TABLE OF CONTENTS	vi
LIS OF FIGURES	vii
CHAPTER 1. INTRODUCTION	
1.1. Overview	1
1.2. Problems	3
1.3. Problems Limitation	3
1.4. Objective	4
1.5. Hypothesis	5
1.6. Research methodology	6
CHAPTER II. INTERFERENCE MITIGATION ON MULTI-TIER CELLULAR NETWORK.	
2.1. Long Term Evolution (LTE)	9
2.2. Femtocell	11
2.3. Interference	14
2.4. Frequency Reuse	17
2.5. Fractional Frequency Reuse	21
2.6. Strict Frequency Reuse	23

2.7. Soft Frequency Reuse	24
2.8. Ada Fractional Frequency Reuse-3	27
2.9. Fractional Frequency Reuse-6	29
CHAPTER III. FORMULATION AND MODELLING	
3.1. Path Loss Model	34
3.2. SINR (Signal to Interference plus Noise Ratio)	36
3.3. Throughput Calculation	38
3.4. User Satisfaction	39
3.5. Proposed Allocation Spectrum	40
3.6. The Steps followed to implement the proposed scheme	47
CHAPTER IV. RESULT AND ANALYSIS	
4.1. Stepping of Simulation	49
4.2. Parameter Value	51
4.3. User Interface	52
4.4. Improvement of Macrocell Performance	54
4.5. Trade-off Femtocell Performance	58
4.6. Performance Comparison with previous FFR	61
4.7. User Satisfaction	65
CHAPTER V. CONCLUSIONS AND RECOMMENDATION	
5.1 Conclusions	69
5.2 Recommendations / Future Work	69
REFERENCE	71
ATTACHMENT	