Project 4 FYS4150

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Abstract

Contents

1 Introduction

2 Theory

Bolzman L=2 case:

No spin up	Deg	Energy	Magnetization
0	1	-8J	-4
1	4	0	-2
2	4	0	0
2	2	8J	0
3	4	0	2
4	1	-8J	4

3 Method

Metropolis (T,A,...) Stokastisk matrise - konvergens (forhold egenverdier).

4 Result

5 Discussion

6 Conclusion

References

Appendix

State	Spinn	Energi	Magnetization
0	↓ ↓ ↓ ↓	−8J	−4
1	↓ ↓ ↓ ↑	0	−2
2	↓ ↓ ↑ ↓	0	−2
3	↓ ↑ ↓ ↓	0	−2
4	↑ ↓ ↓ ↓	0	−2
5	↓ ↓ ↑ ↑	0	0
6	↓ ↑ ↓ ↑	0	0
7	↓ ↑ ↑ ↓	8J	0
8	↑ ↓ ↓ ↑	8J	0
9	↑ ↓ ↑ ↓	0	0
10	↑ ↑ ↓ ↓	0	0
11	↓ ↑ ↑ ↑	0	2
12	↑ ↓ ↑ ↑	0	2
13	↑ ↑ ↓ ↑	0	2
14	↑ ↑ ↑ ↓	0	2
15	↑ ↑ ↑ ↑	−8J	4