

UNIVERSITY OF OSLO
COMPUTATIONAL PHYSICS

Project 1



UiO : University of Oslo

Authors:

Birgitte Madsen

Soumya ??

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UiO : University of Oslo

Department of Physics

University of Oslo

Sem Slands vei 24

0371 Oslo, Norway

+47 22 85 64 28

<http://www.mn.uio.no/fysikk/english/>

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Project Members:

Birgitte Madsen

Soumya ??

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PREFACE

This project is written by 6th semester physics group 4.207a at the Department of Physics and Nanotechnology at Aalborg University, Denmark, in the Spring semester, 2014, as a 10 ECTS-point bachelor project.

Reading Guide

Succeeding chapters support each other, and it is therefore recommended to read the report chronologically. When referring to equations or the like in the text, *equation* will be shortened Eq., *table* will be shortened Tab., and so forth. In App. ?? a list of frequently used symbols and constants are given. The external references used in this work appear in numbered order in brackets in the text and are listed in the bibliography at the end of the report in order of succession.

Signatures

The group member's signatures below express that the entire group is accountable for all aspects of the project and all chapters of the report.

Andreas V. Pedersen

Birgitte Madsen



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INTRODUCTION

Hello, we love computational physics!!

$$\sqrt{2} = \sin(\Theta + \phi \cdot 23)$$

1.1 Nature of the problem

1.2 Description of the Algorithm

1.3 Source Code

RESULTS

2.1 Reliability and Numerical Stability of Results

2.2 Interpretation of Results

CRITIQUE

CONCLUSION