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FYS4150
Project 2, deadline October 2.

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University of Oslo, Autumn 2017

Abstract

Introduction

The problem we will deal with in this project is of quantum mechanical nature. As none of the three authors have had any quantum mechanics courses we will focus on the mathematical and numerical side of this problem. In this project we are going to develop our own eigenvalue-solver by using Jacobi's method. We will study two different cases, the first is for one electron moving in a harmonic oscillator. The second case is for two electrons moving in a harmonic oscillator with and without repulsive coulomb interaction.

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Method

Results

Discussion

Concluding remarks