

# Project 2

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## Abstract

The goal of this project is to explore a model of quantum dots. We will be investigating the behavior of two electron in a 3-D simple harmonic potential while comparing the models with and without the particles interacting. To do this we will be solving the Schrödinger equation using the Jacobi method.

## 1 Introduction

## 2 Jacobi Method

The procedure is as follows:

1. Search for the largest matrix element  $|a_{pq}|$ , where p and q denote the row and column of the max non-diagonal element of the matrix
2. The numbers starts at 1 with every call to the enumerate environment.

## 3 References