

Melon - a Task Scheduling Package for Personal Todo Lists

using Markov Chain Monte-Carlo Methods

An MMSC Special Topic on [PYTHON IN SCIENTIFIC COMPUTING](#)

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Abstract

In this project report we will review the central concepts utilised in the group work conducted to make progress in the Partial Differential Equation (PDE) problem associated with the electrochemical model of a battery cell and present numerical results.

Our Goal: Numerically obtain the solution $\{a(x, T), b(x, T)\}$.

The Finite Difference schemes are implemented in Julia and Python, whereas the Spectral Method is implemented in C++.

Figure 1: The Graphical User Interface (GUI) of the Spectral Solver.

1 Problem Introduction

Acronyms

GUI	Graphical User Interface	1
PDE	Partial Differential Equation	1