MONTE CARLO SOLUTION TO LAPLACE'S EQ ON A RECTANGULAR DOMAIN

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ABSTRACT. We use the Tour Du Wino Method, an algorithm based on Monte-Carlo simulation, to approximate a solution to Laplace's Eq on a rectangular domain with Dirichlet boundary conditions

1. INTRODUCTION

2. BACKGROUND

3. IMPLEMENTATION

4. COMPUTATIONAL RESULTS

4.1. **Plots.**

4.2. **Convergence Towards Analytical Solution.**

4.3. **Computation Time.** DEPARTMENT OF MATHEMATICAL SCIENCES, NEW JERSEY INSTITUTE OF TECHNOLOGY, UNIVERSITY HEIGHTS, NEWARK, NJ 07102
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