

Laplace Equation Example on solving 2nd order Partial Differential Equations (PDEs)

First run this MATLAB function `Laplace_function` that implements the finite difference method to numerically solve a Laplace equation of the form $u_{xx} + u_{yy} = 0$; subject to initial conditions dx, dy ; as grid spacing, temperature matrix `T`, and the boundary conditions.

Then run the example script `Laplace_example` after adjusting the inputs as you want.

Input Arguments in the example script:

- `Nx`: number of grid points in x-direction.
- `Ny`: number of grid points in y-direction.

Output Arguments:

- `A plot of the solution.`

The Plot for the Laplace Equation Example:

