APMA 1941G – MINI PROJECT

Instructions: What is your favorite ODE or PDE? Where does it come from? What are its applications? Why do you like it?

Formatting: Your report should be in pdf format and at least 1 page long (single-spaced) or 2 pages long (double-spaces) 12 pt font, with 1 inch margins. You do not need to include any pictures or references.

Make sure to write down your ODE/PDE. Do NOT just copypaste a Wiki article, but it's ok to paraphrase it. And do not use ChatGPT. You do **NOT** need to solve your differential equation.

It cannot be a differential equation that was <u>extensively</u> discussed in class, but it's ok one that we briefly mentioned, like the minimal surface equation

It would be fantastic if you used an asymptotic expansion to approximate it, but it is not strictly required.

Please make sure your ODE/PDE has some sort of application.