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Lecture 10

Fluid Dynamics and Surface Tension

Python Concepts

- Introduction to flow simulation and basic fluid mechanics principles (continuity equation, Bernoulli's equation).
- Using `matplotlib` for more advanced visualizations (e.g., vector fields).

Application

- Simulating fluid flow in simple scenarios (e.g., flow through a pipe, around an object).
- Visualizing pressure and velocity fields.
- Homework: Simulate and visualize a more complex fluid system, such as flow over a wing.