PDE

P.D.E Fritz John

ref:

- Evans
- 数学物理方程. 姜尚礼

lds: 0.2 + 0.8; 考勤+作业+回答问题; 数学楼213; 周五晚 7:30-9:00

Lec 1

concepts

- order
- linear
- quasilinear
- ∇ operator
- Laplace operator(Δ or ∇^2)
- harmonic function
- gradient(∇)
- divergence($\nabla\cdot$)
- curl($\nabla\times$)

prop

- 散度、梯度和拉普拉斯算子
- curl、div、grad、Laplace

examples

- heat equation
- wave equation
- Maxwell's eq(in vacumn)
- Elastic waves
- Schrödinger's wave eq
- minimal surface eq(分部积分公式)
- Navier-Stokes eq