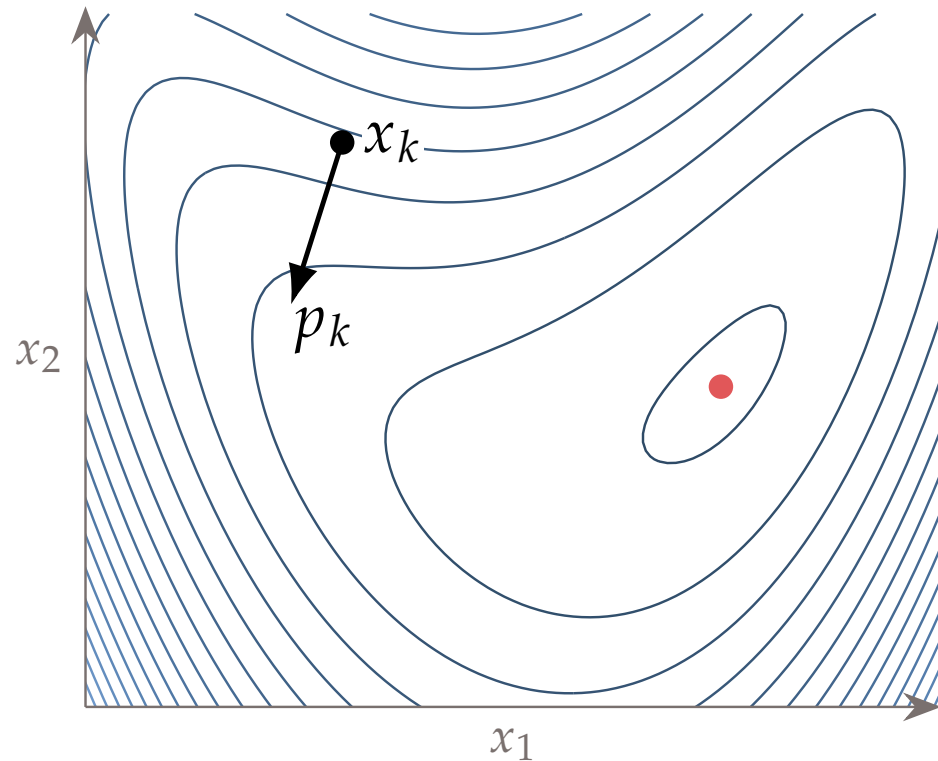


Midterm 2

ME EN 275
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Topics

ODEs

First order ODEs (IVP)

Euler's Method

System of first order ODEs

Higher order ODEs

System of higher order ODEs

(no BVPs)

Previous Topics

root finding

integrals

derivatives

linear solves

Statistics

Summary statistics (mean, variance, stdev, median, percentiles)

Histograms

Correlation and least squares regression

Probability (and, or, conditional, independence, mutually exclusive, priors)

Reliability analysis



$$\frac{dy}{dt} = f(t, y)$$

$$\frac{dy}{dt} = 3y^2 t$$

$$y(0) = 1$$