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National Technical University of Athens

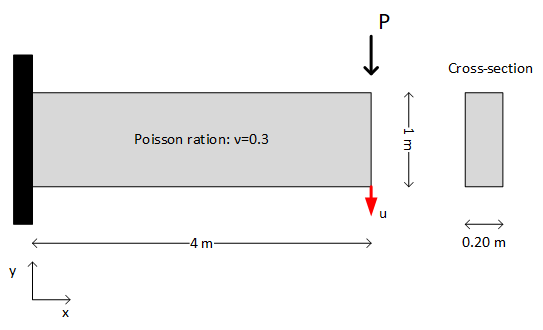
School of Civil Engineering

Acad. Year: 2020-2021

**Course: Stochastic Finite Element methods**

4th Assignment

Consider the plane stress problem:



with and being a random variable, whose initial distribution (prior) is considered to be . Suppose you have performed an experiment and measured the response to be . Assume an additive error for the model, which follows the Gaussian distribution with zero mean and standard deviation 1 (cm).

Perform Bayesian update using the Acceptance-Rejection sampling algorithm to find the posterior distribution of .