

Statistical Inverse Methods, spring 2019

Course page for Statistical Inverse Methods — Tilastolliset inversiomenetelmät

Advanced Course, 5 credits, PAP303, spring 2019, periods 3 and 4

Course is held in Physicum, on Wednesdays at 12-14 in E205. Exercise sessions will be held on Wednesdays at 16-18 in computer class D210.

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Lectures and schedule

- 16.01. [Introduction](#)
- 23.01. ---TRAVELING, NO LECTURE---
- 30.01. [Statistical inference](#)
- 06.02. [Statistical tests](#)
- 13.02. [Linear model](#)
- 20.02. [Linear model](#), [nonlinear model](#)
- 27.02. [Nonparametrical methods](#), [multivariate methods](#)
- 13.03. [Multivariate methods](#),
- 20.03. ---TRAVELING, NO LECTURE---
- 27.03. [Bayesian inference](#)
- 03.04. [Monte Carlo -methods](#)
- 10.04. [Markov Chain Monte Carlo](#)
- 17.04. ---TRAVELING, NO LECTURE---

Course material

The course handout follows previous years but is refined during the course. Latest version is distributed here, but be aware that I will update the material while we advance in the lectures.

Latest [SIM'2019 handout](#) (updated 23-04-2019)

Exercise sessions

- 23.01. [Exercises 1](#)
- 06.02. [Exercises 2](#)
- 13.02. [Exercises 3](#)
- 20.02. [Exercises 4](#)
- 27.02. [Exercises 5](#)
- 13.03. [Exercises 6](#)
- 27.03. [Exercises 7](#)
- 03.04. [Exercises 8](#)
- 10.04. [Exercises 9](#)
- 17.04. [Exercise 10](#)

Supplementary data: [two-variable.dat](#), [linear-model-data-1.dat](#), [linear-model-data-2a.dat](#), [linear-model-data-2b.dat](#), [linear-model-data-3.dat](#), [dataRed.dat](#), [asteroid_density.dat](#), [MN-data-1.dat](#), [MN-data-2.dat](#), [MN-data-3.dat](#), [spectra.dat](#), [Iris.dat](#)

Previous courses

- [SIM in spring 2016](#)
- [DAIM in spring 2014](#)
- [DAIM in spring 2012](#)

Recently Updated

[Statistical Inverse Methods, spring 2019](#)

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[ex-3.pdf](#)

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[ex-2.pdf](#)

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[ex-1.pdf](#)

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