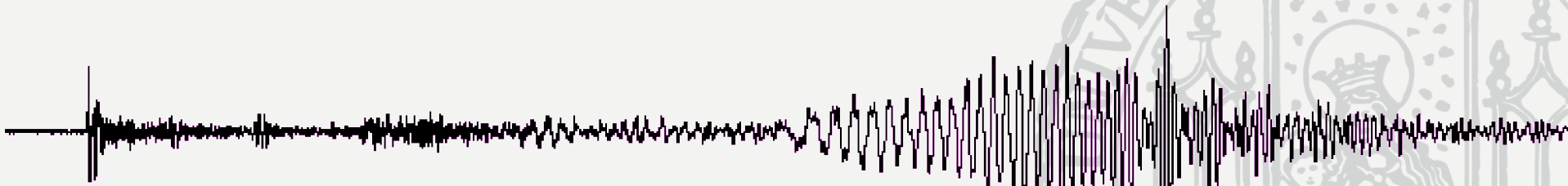
LMU LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

Geophysical Data Analysis

Organisation



Contact

- **Dr. Stefanie Donner**
  - stefanie.donner@geophysik.uni-muenchen.de
  - Room 410
  - Phone -4209 or -73981 (observatory)

    → drop in … (**on Mondays or Tuesdays**)

- **Dr. Céline Hadziioannou**
  - celine.hadziioannou@geophysik.uni-muenchen.de
  - Room 442
  - Phone -4138

- **Dr. Ceri Nunn**
  - ceri.nunn@gmail.de
  - Room 409
  - Phone -4207

Own introduction

How about you:

- What is your name and background?
- What do you expect/wish from this course?

Scope

- Understand the nature of (seismic) observations
- Understand the fundamentals of time series and signal processing
- Understand the many traps associated with filtering and spectral estimation
- Understand linear systems and their connection to filtering
- Understand the strength of correlation techniques
- Learn and apply programming tools to analyse geophysical data

Organisation I

- Mondays from 1:30pm to 5:00pm with break of 30 min (objections?)
- No lectures on 16. Mai (Pfingsten) and 20. June (all three lecturers conspicuous by absence)
- 11. July → full day at observatory in FFB (mandatory!)

Link to course website:

https://www.geophysik.uni-muenchen.de/~hadzii/geoDA_2016.html

Username and password: GDAA2016

Organisation II

- Practical course based on python notebooks

  → lectures, comprehension questions, exercises, programming exercises

  → Bring your laptops

  → focussed on seismology but also magnetics and other

- Each Monday 1-2 students will give a short summary (~ 5min) of last lecture, students will be assigned before randomly, everyone will have the chance (volunteers welcome)
- Final: written report; details and deadline follow later (easy for those who take the course and exercises seriously)

Literature

- ***Time Series Analysis and Inverse Theory for Geophysicists***
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Laptop preparation

- Exercises as python notebooks:

  → install Python 3.4 version of Anaconda:

  http://continuum.io/downloads

  → install Obspy via anaconda:

  https://github.com/obspy/obspy/wiki/Installation-via-Anaconda

- Download notebook for testing from course website and try out

Problems?

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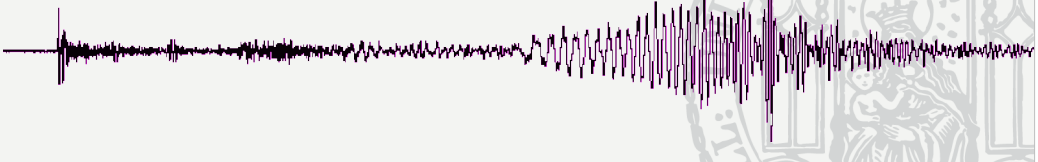

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