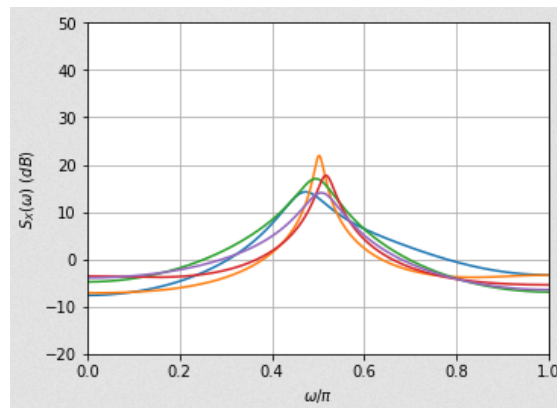


SPECTRAL ANALYSIS (EIEL821)



Course objectives

- Recognize the need for spectral estimation as an essential data analysis tool.
- Understand the main approaches to spectral estimation, including their motivation, performance, advantages and limitations.
- Implement, test and apply spectral estimation techniques using Python.

Syllabus

1. Introduction + Random processes (1 lecture).
2. Non-parametric spectral estimation (2 lectures).
3. Parametric spectral estimation (3 lectures).

Course structure

- 6 lectures.
- 8 tutorial / computer lab (Python) sessions.

Evaluation

- Written / multiple choice question exam.
- Computer exam.