# Digital Audio Coding

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Document Archive (latest update: November 30, 2015)	

# Presentations

- Course Introduction (French)
- Python & Digital Audio Coding
- Lossless Coding
- Spectral Analysis
- Scalar Quantization
- Linear Prediction
- Psychoacoustics

# Lab Sessions

#### Lab 2018

Quickstart: open the Jupyter notebooks in Binder.

All project files and some instructions are available on **GitHub**.

#### Lab 2017

Jupyter notebooks have been introduced.

- Wave / Wave / Wave
- Shrink / Shrink / Quantum
- Quantum / Quantum / Quantum
- Vox / Vox / Vox
- Aware / Aware / Aware

#### Lab 2015 and before

- Wave
- Shrink
- Quantum / Quantum
- Vox / Vox
- Aware / Aware.
   mask.py (psychoacoustic model)

# Book

# Current Version (2017 / work in progress)

```
Binary Coding
/ /
Quantization
/ /
Prediction
```

```
/ / Spectral Methods / /
```

# Old Version (2015)

• The book.

It covers most of the content of the presentations in greater depth, but is slightly outdated; in particular, some of the code examples don't work anymore.

# Exam

```
Exam 2014 (French)
Exam 2015 (French)
Exam 2017 (French)

/
Exam 2018 (French, with answers)

/
Exam 2019 (French, with answers)
```

# Software

Get the latest version of the Python audio package with:

```
sudo pip install --upgrade audio
```

The package was tested on Ubuntu 14.04; it won't work on Windows.