Practical #4: Wavelets

In this session we use the python programming language to perform wavelet decomposition and to give an introduction to the PyWavelets library.
You can use Google Colaboratory as python environment (https://colab.research.google.com/). You need a google account.

1. Which wavelets are present in PyWavelets ?

2. Visualizing several discrete and continuous wavelets

3. Visualizing how the wavelet form depends on the order and decomposition level

4.A Using the pywt.dwt() for the decomposition of a signal into the frequency sub-bands (and reconstrucing it again)

4.B Using the pywt.wavedec) for the decomposition of a signal into the frequency sub-bands (and reconstrucing it again)

5. Reconstrucing a signal with only one level of coefficients