

Supplementary material for *A practical guide to the recovery of wavelet coefficients from Fourier measurements*

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The supplementary material consists of a **Matlab** implementation of the algorithm described in *A practical guide to the recovery of wavelet coefficients from Fourier measurements*. The code includes all files used to generate the figures in our paper, as well as additional examples.

Prerequisites

To run the **Matlab** files in our supplementary material, first download the following packages.

- **Wavelab850**, download at <http://www-stat.stanford.edu/~wavelab/>
- **NUFFT** (for nonuniform sampling), download at <http://web.eecs.umich.edu/~fessler/irt/irt/>
- **spgl1** (for compressed sensing), download at <https://www.math.ucdavis.edu/~mpf/spgl1/>

Description of the six main folders

We list below a brief description of each of the six folders found in our supplementation material.

- **GS_handles**: This folder contains the core implementation of our algorithm, with different reconstruction operators (handle functions).
- **Wavelet_tools**: Code for handling boundary corrected wavelets.
- **Utilities**: Code for handling different sampling schemes.
- **GS_matrices**: Code that produce generalized sampling matrices.
- **WaveLabFiles**: Additional files to supplement **Wavelab850** for handling two dimensional boundary corrected wavelets and wavelets with more than three vanishing moments.
- **Examples**: Examples files, including all the code used to generated the figures in our paper.

A detailed description of each **Matlab** file inside each folder can be found in the following text files.

- `_contents_.txt`
- `Examples/_contents_.txt`
- `Examples/GataricPoonPaper2015/_contents_paper_examples_.txt`

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