README

This is the code supplement to Sonja Greven, Fabian Scheipl "A General Framework for Functional Regression"

The `.Rmd` files (see below) recreate the datasets and models used in the paper and expect a writable folder *`/models`* in your working directory to save results into.

Contents

- `models_fun-on-scalar.Rmd`, `.pdf`:
  contains code for the function-on-scalar regression example with **`refund`**'s `pffr()` function discussed in Section 2
- `models_scalar-on-fun_fdboost.Rmd`, `.pdf`:
  contains boosting code for the scalar-on-function regression example with **`FDboost`**'s `FDboost()` and `FDboostLSS()` functions discussed in Section 3.
- `models_scalar-on-fun_refund.Rmd`, `.pdf`:
  contains boosting code for the scalar-on-function regression example with **`refund`**'s `pfr()` discussed in Section 3
- `dti_s_on_f.rds`, `dti.rds`, `dti_ms.rds`: datasets used in in the `.Rmd` files, see documentation for `DTI` dataset in **`refund`**
- `FDboostLSS_noncycnlical.R` adapts `FDboostLSS()` to the non-cyclical boosted GAMLSS algorithm implemented in the development version of **`gamboostLSS`** used here (version 1.3-0, commit `19626ea`) used for the results in the paper. This will be included in upcoming CRAN releases of **`FDboost`**
- `pffr-models-utils.R`: various visualization and postprocessing functions for `pffr()` models